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### GEORGE ANDREW LEWIS

Founder of the Lewis Phono-Metric Method. Principal of The Lewis School for Stammerers. Detroit, Mich. Author of "The Practical Treatment of Stammering," "The Origin and Treatment of Stammering," "Method of Attack for Stammerers," etc.

Awarded a Gold Medal by the Louisiana Purchase Exposition for the excellency of his methods of instruction and treatment for the permanent cure of Stammering and Stuttering.

# HOME CURE FOR STAMMERS

BY

GEORGE ANDREW LEWIS

(An inveterate stammerer for more than twenty years)

Originator of The Lewis Phono-Metric Method for the Cure of Stammering and Stuttering, Founder and Principal of the Lewis School for Stammerers, Author of "The Practical Treatment of Stammering," "The Origin and Treatment of Stammering," "The Stammerer's Guide," "Method of Attack for Stammerers;" awarded a Gold Medal by the Louisiana Purchase Exposition.

A compilation of extended views and advice by forty writers and authorities on the subject of Stammering and Stuttering, with specific directions for Home Treatment and Cure.

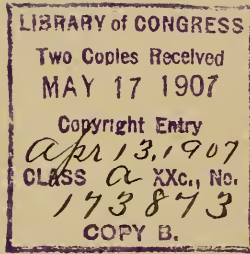
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GEORGE ANDREW LEWIS

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## PREFACE

It is the author's aim in compiling this book to give to speech sufferers, stammerers and stutterers the world over, and to preserve for their benefit for the future, the best advice, instruction, and treatment considered best in the cure of stammering and stuttering which has appeared in print during many years.

So little of value relating to the subject, other than the instruction contained in the books the author has published, being obtainable, it is to be hoped the opinions expressed will be carefully weighed by the reader. Great benefit must surely result from painstaking study and application.

The opinions of the writers differ in many cases; because of this fact the reader is offered an opportunity to judge each view separately, and can make the book a valuable guide for Home Instruction and Cure.

No two cases of stammering present like manifestations. No two stammerers are alike in disposition. It is largely because of this, owing to the probability that each writer has based his judgment wholly upon the manifestation of stammering in only a few cases, that such widely different views are expressed.

The reader should carefully study each view separately, thereby profiting by the advice which may seem applicable to his or her particular case. The author, who has carefully compiled the views herein contained, urges the need of application in carrying out the principles suggested. He feels satisfied, from long years of experience in the treatment of stammering, it is not knowledge altogether that is required. A knowledge of correct theories is required, but coupled with this knowledge there is also required much practice. Without practice in the execution of the advice suggested, all study will be in vain.

To those who have contributed toward making this book of helpful instruction for the stammerer possible, the author feels deeply indebted and grateful. Their words of cheer and encouragement have helped him along the road in his life-work of loosening the stammerer's tongue. Their opinions, variously set forth, will bear fruit in the alleviation of the stammerer's woes for a generation to come. To more than one hundred and fifty thousand stammerers and stutterers with whom the author has personally corresponded, to speech sufferers the world over, to thousands who have been treated under his instruction, this book is respectfully submitted.

GEORGE ANDREW LEWIS



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# THE TREATMENT OF STAMMERING AND STUTTERING FROM EVERY KNOWN CAUSE

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BY GEORGE ANDREW LEWIS

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The causes that lead to the development of stammering and stuttering are numerous. At the head of the list stand heredity, mimicry, sickness, fright, and carelessness. These causes are productive of types as varied and diversified as are the many types of man.

From remote ancestry those of the present generation have inherited impulses which predispose the individual to certain mental, moral or physical conditions. Thus arises in the character and general makeup of the stammerer much that is hard to understand, and in some cases inexplicable. So many varied influences are multiplied in every *being* that it is difficult to discriminate between the effects of heredity and the influence of environment.

A certain mental or moral strain not in itself conducive to stammering may be inherited from some distant ancestor. This hereditary tendency, foreboding no evil in itself, coming in contact with certain physical conditions, precipitates an unfortunate combination whence may arise serious speech difficulties. The manifestation of the difficulty may be either stammering or stuttering.

One cause which may lead to the condition of stammering is the impairment of nerve centers through some nervous disease by which the mental and moral fibre is weakened. In considering the subject of stammering and stuttering there is an error to be avoided: it is a mistaken notion that this affliction is directly inherited from some

ancestor. What is inherited is a disposition to stammer or a tendency to stutter. Much in one's make up, such as timidity, impulsiveness, extreme sensitiveness and nervous excitability may be inherited. One with such a temperament is more liable to stammer than one whose nature is stolid and phlegmatic.

Therefore, it is worth while to keep in mind, as we consider the various causes for stammering and the types which occur, that stammerers are not born, but made. Through heredity comes only the predisposition to stammer. "Stammering," says Klencke, "is not independent, it is not a disease in itself. It is in every case a symptom, only a reflection of a predominating mental and physical desire."

When an individual says his stammering is due to nervousness, he expresses what to his mind is true. He has stammered so long he has lost the relationship between cause and effect. It is, in a measure, true that the disease, stammering, and its symptoms are, each in turn, cause and effect.

It seems logical to speak of heredity and its influence thus early, for so many types of stammering are traceable in their development to the individual's predisposition to stammer.

Two great influences play each their powerful part in the making of individuals—these are *heredity* and *environment*. At times, it is puzzling to know just where the influence of heredity stops and that of environment begins. On the other hand, there is a fearful force wrought from the combination of these two ruthless powers. What the one has projected, the other carries out. The whole subject presents such an appalling phase, it is an oft contested matter which is the stronger. When the hereditary tendencies are good and the environment bad, we are fearful of the consequences. However, we occasionally brace our faith in the eventual result to character, by saying, "His hereditary tendencies are good." At another time, when wrack and ruin seem

to be coming to one inheriting, as we *suppose*, right tendencies, we charge the wrongs heavily upon the force of environment. When the hereditary tendency is toward weakness in any direction, and the environment bad, there can be but one result anticipated. When the inherited tendency is bad and the environment the best, to a certain extent normal conditions of body or mind may be approximated. This, however, is never certain. There is much to be feared. However, this is a subject on which there is a wide variation of opinion. Dr. Sydney B. Elliott, writing on prenatal influence, touches interestingly on the matter of heredity. "The circumstances which go to make him (man) what he is, whether it be a theologian, or a scape-grace, a mathematician or a fool, concern all. It is a subject of the utmost importance. . . . "Information from the proper source must be disseminated through the most available channels. The time when physicians kept the masses in darkness as to what was their most vital concern, either from ignorance or from selfishness on their own part, is past. Current literature opens up a wide avenue for a flow of vitalizing information to a needy public, and the true physician, who has the permanent welfare of the race at heart, will make use of every available means to help his fellow man in his struggle for a higher life."

"Heredity is that law by which permanent and settled qualities of the parents, or of the more remote ancestors, reappear in the child. \* \* \* \*

"It is a matter of every day note, that children of the same parents, born within a few years of each other, are often totally unlike in disposition and in physical attributes. They may be not only unlike each other, but unlike the parents themselves."

The longer one looks into the subject of heredity and its influence, the more seriously is one convinced of the subtle inexplicable part it plays in making for misery or happiness. Heredity is a grim master—it is relentless. It may slumber through one generation only to set its

stamp upon the succeeding one. It may seem dormant through several generations only to assert itself either lineally or collaterally, in a much later generation. We must keep in mind, it is heredity that predisposes and then an immediate cause which *produces* stammering. In many cases where the cause is unknown there is possibly, way back, a progenitor with defective speech. Illness, mimicry or fright touch off the latent weakness into the full flame of a glaring defect. The farther back the defect, the safer is the child from the results of predisposition, all conditions in his own life and that of his parents being propitious. Seldom do the children of stammering parents escape some difficulty with their speech.

#### ANCIENT NOTIONS REGARDING THE CURE

Down to the middle of the nineteenth century the ideas for the treatment of stammering were, in many instances, vague and unformulated. To modern teachers, with the advanced methods of the present, the majority of the ancient teachers speak negatively. They are guideposts, telling them what to avoid, rather than whither to direct, their pupils under treatment. The history of the cure of stammering unfolds an interesting panorama, involving scenes ranging from those exhibiting cruelty of treatment to such ridiculous methods as excite our risibilities. The knife of the surgeon was active in the name of science, cutting out the various portions of the anatomy wherein the practitioners formerly thought lay the cause. Others, attributing the difficulty to nervousness, induced by derangement in the digestive tract, as a counter irritant, produced ulcers. Closely allied to this cure (?) was the poulticing of the head in order to draw the infection from the brain. Another, who charged a large amount for what would constitute speech-control, had his pupils inhale the odorous vapor from a decoction of herbs! Many of these were earnest, honest seekers after relief—often-



times for themselves. When we stop to consider that only in comparatively recent times have certain physiological facts come to be understood, it is not strange that these early investigators should fall, in some instances, so far short of the mark. It is not three hundred years since Harvey discovered the circulation of the blood. Up to the time of his discovery, some very wise people held peculiar notions as to this interesting part of the physical economy. Thus, through centuries and cycles of time until very recent years, it has been a problem how to cure stammering.

In the diagnosis of thousands of cases,\* not one case have I found attributable to organic defect. Although it is possible for the functional difficulty and organic defects to be present in the same individual, stammering is not caused by a malformation of the organs of speech. Columbat, whose investigations extended to several hundred cases, found not one traceable to defective organs. This, and similar experiences of other authorities, would lead to the conclusion that the articulatory organs of stammerers and stutterers are normal. In *use only* do their organs of speech differ from those of individuals whose speech is facile and fluent.

#### HIGH FEVER AND DELIRIUM

Certain diseases induce stammering. Those eruptive and infectious diseases may be especially noted which are accompanied by high fever and delirium. Where there is a predisposition to stammer, a derangement of the functional powers of speech often follows. It is safe to say that a system, weakened by any disease which depletes the nervous stamina, is in a condition to be attacked by stammering.

Whatever injures the nervous system by sudden shock, whatever induces weakness and lack of nerve control,

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\*I have corresponded with more than one hundred and fifty thousand persons who stammer.

lowering the mental and physical tone, if one has inherited tendencies to stammer, opens the door to stammering. Sudden fright, brain difficulty, scrofula, diphtheria, scarlet fever and many other eruptive diseases, especially if accompanied by fever, are liable to result in stammering. However, it is worth while to note that the fever accompanying those diseases appears to be responsible for the disturbance in speech functions. Moreover, stammering comes only after the delirium attendant with the fever.

This forcibly strengthens the position which I hold in respect to stammering, making it all the more apparent that it is a disease of the mind. Investigation proves that, in those who become stammerers through illness, there existed a predisposition in that direction. Had not illness lowered their vitality, these persons would, probably, never have become the victims of their inherited tendency. Exhausted vitality and depleted energy weaken the motive power. This motive power, which was never excessive in these persons, was necessary for the equilibrium of control, and the loss of it was conducive to the development of the hereditary tendency.

#### HARMFUL EFFECTS OF MIMICRY

Conscious and unconscious imitation have added largely to the afflicted number of stammerers. A large percentage of those suffering from this malady, attribute their sad condition to mimicry or imitation. My experience, through personal contact and through correspondence with many suffering from speech defects, confirms what leading authorities state: that stammering or stut-tendering, induced or aggravated as the result of imitation, or mimicry, is, in severe cases, difficult to cure. Charles Kingsley, the eminent divine of the Church of England, who was through part of a life time a severe stammerer, tells of the dire effects of mimicry. Very often children are made life-long stammerers by being thrown in contact with others thus afflicted. One frightful stammerer whom

Canon Kingsley knew, was made such by listening, when seven years of age, to a lawyer in a court of justice. This man's attempts at utterance were painful to behold, and every effort characterized by wretched contortions, made a deep impression upon the brain of the sensitive little child, whose condition had been made the more impressionable by brain fever, from which it had recently recovered. Others have fallen victim to the power of mimicry by "taking off" eccentric stammering characters upon the stage, or have themselves enacted these character parts, only to awaken some day to find themselves in the class of sufferers they were holding up to ridicule.

#### OVERTAXING OF THE MENTAL FACULTIES

Overtaxing of the mental faculties of precocious little children, frequently causes stammering. The parents are fascinated with the charming manner in which the little minds grasp and hold difficult words and sentences. The next step is the oftentimes thoughtless subjection of these little ones to the strain of learning long selections. These sound so quaint and cunning coming from such diminutive personages. Thus oftentimes, unwittingly, some one is accountable for definite injury to the brain of the sensitive child; undue excitement is produced and the speech centers of the brain are affected disastrously.

With the exception of the inherited condition, probably the gravest form of stammering is that which accompanies a depleted, exhausted condition of the whole system. Children who have developed too rapidly, who are overgrown and who, therefore, lack sufficient vital supply, are liable to this severe form of stammering. Their debilitated, nervous condition, manifested in tremor and lack of control, is very receptive to stammering when there is an inherited tendency.

WRONG HABITS LIKE RANK WEEDS THRIVE AND DEVELOP AS  
IF BY MAGIC

Mothers have often written to me asking for advice for training their children, who evidenced a tendency to stammer. Carelessness in the training of children at a tender age is responsible for much misery and suffering. Parents who neglect a stammering child, unknowingly commit a sin that in truth may be visited "unto the third and fourth generation."

There are numerous cases of stammering which are caused by the neglect of those who should be responsible for the education and training of the child, or by the carelessness of the individual himself. Wrong habits, like rank weeds, thrive and develop as if by magic. The child or adult, not realizing the importance of clear and distinct enunciation, stumbles along and utters his words imperfectly. Hesitation, mispronunciation and slurring of syllables are all followers of carelessness and neglect. There arises a diffidence about attacking words difficult to pronounce. The purpose of speech, the clear conveyance of ideas, has no place in the mind of the stumbler, the vocal organs become rigid, when they should be pliable and responsive, the moral mastery of speech is eventually lost and a stammerer is the result.

## DEGREES OF AFFLICTION IN STAMMERING

The extent or degree of stammering expresses itself over a long scale of graduation, and the two great factors concerned in the balance of control are, *mental emotion* and *motive power*. Upon the proportion which these two forces maintain in relationship to each other, depends the degree of difficulty in speech production. Moreover, there exist as many degrees of difficulty in this long scale as there are individuals afflicted with stammering, for, as there are no two persons alike in all particulars, each differing according to the constituents of his character and physiognomy, so no two persons suffer in exactly the



same way from stammering. One stammerer, because of his peculiar temperament, betrays his defect in one way, while another is influenced in an entirely different manner. One speaks with the utmost ease when in the presence of strangers, but finds it impossible to speak in the presence of his relatives and immediate friends. Another has experiences exactly the opposite. This one cannot address an audience, that one succeeds admirably in argumentative address, but seems unable to command his powers of speech at other times. While still another, stumbling and suffering from extreme difficulty when uttering his own thoughts, can quote the words of another with ease and fluency.

Under certain conditions one of the worst forms of stammering manifests itself in muscular contractions, which amount at times to spasms, so abnormal and utterly without coördination are the workings of brain and muscle.

One writer, treating of these contortions in attempts to speak, says: "In all the cases where the motor influences of the brain and spinal chord are in a state of depression, the muscles of the body which they actuate become relaxed, and, consequently unequal to natural action; for where the will endeavors to actuate muscles thus situated, their first tendency is to a tremulous, uncertain action; the will, however, continues to press upon these muscles, thus already rendered irritable and hesitating, and the consequence is an excessive and spasmodic, instead of a natural action."

#### BROCA'S CENTER SEAT OF SPEECH CONTROL

Comparatively recent are the definite results in research as to the seat of control of the powers of speech.

Eminent authorities everywhere concede that the origin of stammering is in the brain. The stammerer's brain differs from that of the individual whose speech is normal, as to sensibility of fibre in those portions which have to

do with speech control. This difference is noticed in comparing the results of mental activity. The portion of the stammerer's brain concerned in speech, is extremely sensitive to external influences.

There are instances which confirm the opinion that the difference is one of sensibility rather than fibre. There are many persons, in no way addicted to stammering, who, under excessive strain or shock, produced by a catastrophe, profound perplexity, or any temporary paralyzing power, thus affected have stammered. As soon as the will and reasoning faculties return to equilibrium, the power of speech is easily regained.

The controlling mental power in speech furnishes in itself a broad and fruitful field of study and research. Previous to 1861 there was much discussion as to what portion of the brain governed language. Then came the eminent French physician Broca with his theories concerning brain centers and the peculiar office of each. Wernicke also shares with Broca the honor of this discovery.

Some of the leading phrenologists contest that the credit for the discovery of the speech motor area belongs not to Broca, but to Gall, who preceded Broca some years in this discovery. The phrenologists assert that modern physiologists have conspired to ignore Gall and his earlier work. To prove this point, they produce the illustrative plates which Gall used to demonstrate his theories. These certainly reveal a careful study of the brain, as do the numerous cases cited by Gall to prove localization of motor centers.

However, it is not my purpose to enter into any argument on these points. Those who are interested enough to pursue the investigation further, will find interesting data on the phrenological side of the question by reading the extensive volume by W. Matthieu Williams. Exhaustive testimony, as far as physiologists are concerned, awards the honor of the discovery of the localization of brain motor areas to Broca, while some divide the honor

between Broca and Wernicke. Concerning Broca, speech centers and the development of speech itself, it is the purpose of the author to quote here extensively from authorities eminent in their respective lines.

#### HISTORY OF DISCOVERY OF SPEECH CENTERS

\*"In the year of 1861 Broca presented an epoch-making communication to the Paris Anatomical Society, which seemed to prove that the morbid anatomy of asphasia [loss or impairment of the power of using language, especially of articulate speech.—*Standard Dictionary*.] was a lesion of the posterior part of the third convolution. Before that time much speculation had been indulged in concerning the faculty of language. . . . At first, many of the most eminent minds in the profession refused to believe that the emissive speech faculty was confined to the left half of the brain. \* \* \* Broca's communication opened a new era in the understanding of speech. \* \* \* It may be said that Broca and Wernicke should be accorded equal parental rights in the interpretation of the complexity of symptoms included under the term aphasia to-day."

#### THE CENTER OF SPEECH

†"The center of articulate speech is, perhaps, one of the most definitely settled points in cerebral localization, and this is all the more interesting since this is the only sharply defined faculty which has, as yet, been definitely localized. \* \* \* The credit of the great discovery that the center of articulate speech could be localized in the third convolution of the left anterior lobe of the cerebrum, is generally awarded to Broca. Some twenty-five years before, he made the profession alive to the investi-

\*"Faculty of Speech," Collins; chapter II., page 17.

†"The Applied Anatomy of the Nervous System," Ambrose L. Ranney, A. M., M. D., page 32.

gation of the subject. However, the same impairment or loss of speech was shown to be a frequent accompaniment of hemiplegia [paralysis of one side of the body] of the right side of the body by Bouillard and Marc Dax; and in 1863 or thereabouts, the views of Broca and of Hughlings Jackson were given to the profession, in which they both limited the lesion of aphasia to the parts supplied by the left middle cerebral artery. In 1863 the investigations also of the son of Marc Dax located the lesion somewhere in the anterior or middle portion of the frontal lobe of the left side, and the results of still more recent investigations upon the subject seem to point to the island of Reil as the most frequent seat of this peculiar type of paralysis.

"Viewing the fact that articulate speech is a thing learned by use, it has been suggested that, in most persons, one side of the brain has been educated for that purpose, that we are, in fact, left-brained in respect to speech in the same way that we are right-handed in respect to many bodily movements."

To show the uniformity of authoritative ideas regarding the most important facts concerning the governing centers of speech, I shall continue to quote freely, though these pages may seem redundant, the ground covered by the several authorities being nearly the same.

†"Broca, in 1861, showed that motor aphasia was produced by a lesion [any derangement or morbid condition of a function or organ] of the posterior part of the third left frontal convolution. Complete motor aphasia is almost always accompanied by paralysis of the right side of the body."

‡"The speech center is found in right-handed persons in the left hemisphere and comprises the posterior part

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†"Diseases of the Nervous System," Oppenheim.

Diseases of the Brain, Section III, page 396.

Broca, p. 455.

Mechanism of Speech, p. 458.

‡20th Century Practice of Medicine, Vol. X., p. 764, etc.

Disorders of the Nervous System.

"Disorders of Speech," Howell T. Pershing.



of the third frontal convolution, the first temporal convolution, and perhaps the gyrus angularis (the center for supplementary sensations). The posterior part of the third frontal convolution contains the motor speech centers, the region where concepts are converted into words. The posterior part of the right third frontal convolution seems to have a minor part in the act of speech,—i. e., the place where the memory for the sound of the word exists. According to Flechsig, this center comprises also the horizontal convolutions of the temporal lobe, which lies in the fossa sylvia (the roots of the first temporal convolution). The part which the gyrus angularis [one of the convolutions of the cortex of the brain,] is supposed to play in reading, will be described later. A special writing center probably does not exist. Charcot and Pites located it in the foot of the second frontal convolution. It is doubtful if the island of Reil is involved in the central acts of speech. It probably contains conducting parts, which connect the motor with the sensory center of speech. Flechsig says that the island of Reil seems to be a center which connects the motor and sensory cortical zones involved in speech into a unit." . . .

According to Oppenheim, disorders of speech are better understood "by analyzing the mechanism of speech by means of a schematic representation. We must, however, remember that all diagrams are somewhat artificial, and that all forms of disease cannot be put into them. We are indebted to Wernicke, Lichtheim, Charcot, and others for schematic representations of speech. Though they do not entirely harmonize, they have shown us the way of acquainting ourselves with the mechanism of speech. Only the most important facts will be given.

"K" in Fig. 1 (page 20) represents the center for the sound of words. The words enter the ear, pass along the acoustic tract from *D* and leave behind memory pictures in *K*. The workshop for the production of words is at *A*. The sound of words stored up at *K* are imitated until a similar sounding word results. This occurs in *A* under control

of *K*, until finally the concepts of the vertical movements in *A* become so independent that they can be directly produced from the concept center *B*. Many observations seem to indicate that the track *B K A* is used in spontaneous speech also. The conducting path connecting *A* and *K* appears to pass through the island of Reil. From *A* the impulses pass to the nuclei [a group of cells from which nerve fibres originate,] in the medulla oblongata, perhaps first to the cortical centers for the muscles of articulation at

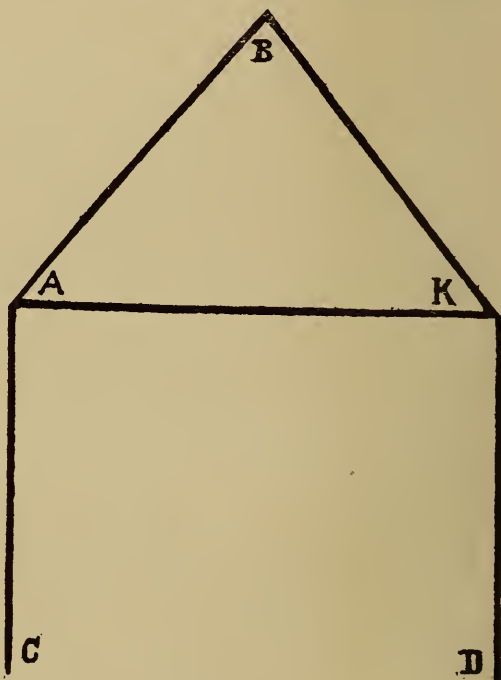


FIG. I.

the foot of the central convolution which govern the movements of the muscles of speech. For the sake of simplicity the concept center is regarded as being single, although this is not true. The formation of concepts is a complex process, and is connected with the whole cerebral cortex.

"Verbal concepts, for instance, contain motor, visual and auditory memory pictures. The word BREAD is composed of a graphic picture, a sound picture, a motor memory picture for muscular movements needed to speak the word, and another one for the movements of the hand, ready to write it. \* \* \* \* \* This shows that the concept of the concrete object is not connected with

one center, but that it is fed by different mental spheres, by a summation of memory pictures of perceptions belonging to the senses and that it can be directly or indirectly executed through these."

To further lucidate this interesting subject of speech centers, the accompanying diagram and description by Pershing of the acquisition of language by a child, may be studied with profit.

#### THE ACQUISITION OF LANGUAGE BY A CHILD

"Now, the meaning of a word is always the memory of a sensation or a group of sensations. The memory of the word *red*, for example, is the memory of the color red. It is one of the fundamental facts of psychology that if two sensations frequently occur at the same time,

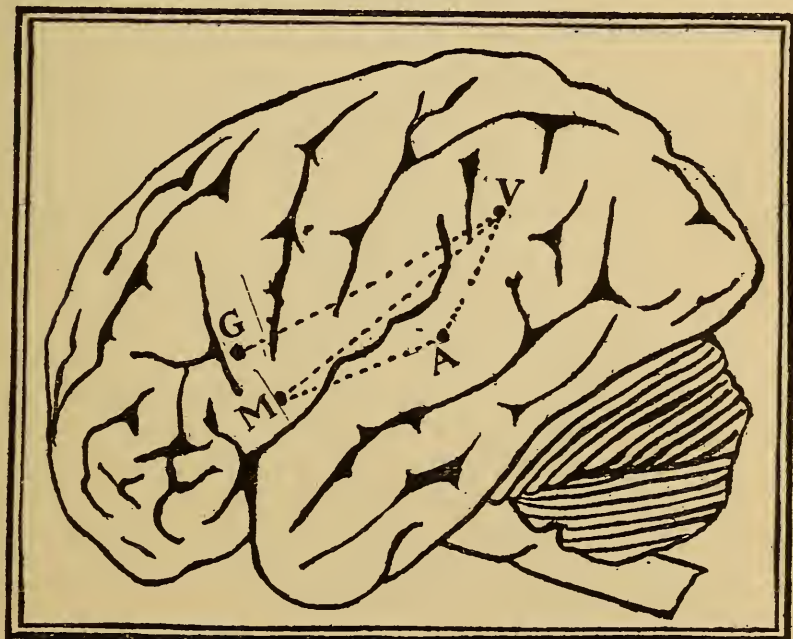


FIG. 2.

#### DIAGRAM OF THE LEFT CEREBRAL HEMISPHERE

- A. Auditory Center.
- M. Motor-speech Center.
- G. Center of Coördination of movements of the right hand in writing.
- V. Visual Center.

or in close succession, one of them occurring afterward alone, will recall the memory of the other. After a child has seen the color, red, and at the same time heard its name, the two sensations become associated. What was mere sound, now revives the memory of a color, and so has a meaning. How can we picture this association as a physical process in the brain? Each time that the sensation *red* occurs the cortical visual center (see *V*, figure 2) is excited in a peculiar way and is left in such a condition that it will be more easily excited in the same way in the future. Moreover, as the nerve cells in this region are connected with other parts of the brain by nerve fibres, the excitation is not limited to them alone, but tends to arouse other centers, among these the auditory center, *A*. If *A* is excited at the same time by the sound of the word *red*, it also tends to excite other centers through its connecting fibres, so there is a double excitation along the path, *A V*. The oftener this double process is repeated, the less resistance along the path *A V*, and the more ready each center is to respond to an impulse from the other. Finally the two centers become so related to each other that whenever the sound of the word is heard the auditory center sends to the visual center an impulse strong enough to excite it in the same way, although not so vigorously as the actual color would. Instead of the color sensation we have the memory of the idea of it, which is said to be associated with the sound of the word. The fibres connecting the two centers are called *association fibres*. Two associated ideas, however, do not necessarily exist in different centers; both are often in the same center, in which case association is said to be intra-central.



## THE UTTERANCE OF WORDS

"After learning to understand a few words, the child begins to utter some of them. The simple movements of the vocal organs have already been acquired, and their cortical centers in the lowest part of the motor area are well developed. But to combine these movements so as to form articulate words, another center comes into action, the *motor speech center* or *Broca's center*, situated at the base of the left 3rd frontal convolution (see *M*, Fig. 2.) In it are stored the memories of the movements necessary for the articulation of each word.

"To combine the elementary sounds into words, this center must, of course, control the action of the lower nerve centers for the vocal organs, that is, the motor nuclei of the 5th, 7th, 10th, 11th, and 12th nerves. Whether this control is affected through a separate path leading directly to these nuclei or by regulating the action of the cortical centers for the simplest movements, which in turn control the nuclei, is not known. It is known, however, that the fibres conducting speech impulses to the nuclei pass through the internal capsule [an inclosing membrane,] where they frequently suffer injury.

"The first utterances are imitations of words frequently heard by the child without any sense of their meaning. This imitative process is an acquired reflex. The auditory center, on perceiving the sound of the word, sends impulses to the motor-speech center, arousing it to send such impulses to the vocal organs as will cause the word to be uttered. It is important to note that the motor processes of speech develop only under the guidance of the auditory center. Deafness occurring in childhood not only prevents further progress in learning to talk, but up to the age of four years, and, in some cases, much later, it causes the loss of the power of articulation already acquired. On the other hand, the motor speech center has a very important influence upon the auditory center. The sound of a word is much more distinct when

we remember its utterance, no doubt owing to association impulses passing backward from Broca's center to the auditory center."

Further reading introduces us to the exhaustive treatises of \*\*Gower and \*\*\*Gordinier, who write interestingly of Broca and the subject of speech control.

#### CONFUSED NOTIONS WITH REGARD TO THE DIFFERENCE BETWEEN STUTTERING AND STAMMERING

Before proceeding to a consideration of the more pronounced types of stammering manifested in the articulatory organs, I shall endeavor to make clear the difference between stuttering and stammering—which, in combination, frequently afflict the same individual. Concerning stuttering and stammering, there is a confusion of ideas in some minds and many otherwise well-informed persons use the terms stuttering and stammering interchangeably.

The ideas concerning these two forms of functional speech disturbance have, probably, become confounded in consequence of the vast array of conditions presented by abnormal speech. These so dissimilar, have been congregated under one head or the other and subjected to one general treatment.

So universal at one time was the ignorance of speech defects that all forms of stuttering and stammering were called stuttering. The investigators, trying to find a local cause for the difficulty, stimulated a craze which sought alleviation and freedom of speech at the hands of the surgeon.

In its general acceptance now, stammering is a term embracing all the variations of both forms of abnormal speech. But this does not debar a distinction and separation which may proceed through many degrees of the difficulty.

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\*\*W. R. Gower, M. D., F. R. C. P.

\*\*\*Central Nervous System, Gordinier.

Stuttering is engendered by nervous weakness and a poor physical condition generally, and manifests itself in lack of breath control and syllabication. The words and phrases are reiterated in nervous jerks. Stammering, on the other hand, is caused by disturbance in the brain centers or by a peculiar sensitiveness which manifests itself in excessive efforts to speak. In severe cases of stammering the facial muscles contract violently, distorting the features, the tongue works spasmodically, and in the worst types, the supreme but futile efforts to articulate are manifested in bodily convulsions painful to witness.

Stuttering is largely a physical trouble, by no means difficult to rectify. The average stutterer may be entirely cured by right treatment in a very short time, the stammerer, on the other hand, suffers from a deeper, more complicated malady, which because of its lodgement in the brain is more difficult to eradicate.

The exhaustive reading of many leading writers upon speech defects, together with a wide and varied experience examining and treating thousands of cases of stammering and stuttering, brings the following deduction as to the difference between the two difficulties:

*Stuttering—A defect in respiration and vocalization, oftentimes causing spasmodic action or the rapid repetition of one word or syllable before the following word can be uttered.*

*Stammering—The inability under certain conditions to articulate or control the organs of speech which are usually, under such circumstances, tightly held together, accompanied in many cases by the substitution of one sound for another.*

In stammering, the difficulty arises from a certain deficiency or inability to control the organs of articulation.

Stuttering is a comparatively simple condition, largely attributable to habit. Unlike the stammerer, the stutterer is seldom subject to any contortion of the features and never to convulsions.

Many severe cases of adult stammering have developed from stuttering children whom right methods, had they been understood, might have saved from years of indescribable misery. The stammerer never becomes a stutterer. The sequence of development is, as stated, the physical trouble, unless alleviated, being liable to merge itself into a mental difficulty, the manifestation of which is stammering. In such cases, incessant stumbling and struggling and reiteration have destroyed confidence. Repeated failure has filled the brain with apprehension. Futility of efforts to speak has temporarily destroyed the stutterer's mental equilibrium. Lack of confidence becomes habitual. Stuttering is indicated by hesitancy in pronouncing words or in the rapid repetition of words or whole phrases, while stammering manifests itself in the tendency to use synonyms, or in the avoidance of words presenting difficulties.

When persons both stutter and stammer, difficulty characteristic of both impediments is manifest in their attempts at speech. The respiration is abnormal, the breath is taken in nervous gasps, the syllables are reiterated with marked rapidity at one time, while at others there seems to be a complete blocking of the avenues of speech. Agitation racks the nervous system and leaves the struggler exhausted. Thus we find the stutterer and stammerer is between Scylla and Charybdis. Should he escape one terror, another is ready to thwart and overthrow him. What wonder that many a one thus afflicted is old before his time or dwarfed in hope and aspiration until there comes to him the good news of possible relief and cure.

#### MANY DIFFERENT TYPES MARKED IN CHARACTER

It is not my purpose to present a formulated list of cases of stammering, giving, for instance, so many of a nervous tone, so many of another, but to bring before the reader individuals, from the various classes, whose stammering has been in some way marked in character. Even stammerers themselves have no conception of the



vast array of differences manifested by the great afflicted army. Some readers of this statement may wonder why this is true. Many stammerers have told me that never had they seen others afflicted as themselves until they undertook institutional treatment. In fact, they did not, in some cases, even among intelligent people, know just what was the trouble, for they had not observed anyone else in any way so troubled. This brings up a point which, to the ordinary reader, may seem incredulous, but it is, nevertheless, true. There are large communities where there are no stammerers; even small cities where few are so afflicted. This would indicate that stammering is an altogether abnormal and unusual affliction. The large numbers presented in a flourishing institution represent widely separated districts, and, even to know the far points whence they come, presents an interesting array of data.

Some very pronounced cases come to my mind, showing that the manifestations of any particular type are not always the same, each one taking its coloring from the temperamental characteristics of the individual.

One case which had occasioned no small amount of suffering to the stammerer himself, and anxiety and apprehension to his friends, was that of a young man of about twenty-five years of age. At a glance, one would place him in the exceedingly nervous class,—tall, very thin, somewhat stooped; with large nervous looking eyes that seemed ever in quest of focus. His endeavors to speak would have been ludicrous to the thoughtless, did one not appreciate the misery and humiliation of his position. A young man of fine mind, appreciative, overly sensitive as stammerers frequently are, he was a most forlorn and, to the inexperienced observer, hopeless case when the writer first met him. His endeavors to say the simplest words and shortest phrases of ordinary greeting, were frequently ineffectual. Moreover, the peculiar struggles through which he passed physically, in his vain attempts at even phonation, would have been the subject of ridicule.

Were he reading, he would appear to stare wildly at the words as if to take them in literally—but no sound would come! Then he would tilt up on his toes and down again; still no sound! These manifestations of stammering were augmented by a vigorous and oft-repeated clearing of the throat, “hemming,” as some would call it. The outcome of these painful and humiliating attempts was often failure to speak, the young man going away exhausted. An increase in the severity of his malady, lost for him a very excellent position, and it was in this depressed and forlorn plight he applied to me for relief.

A very unusual case is that of a stammering singer. Where vocalists of any eminence have been thus afflicted, the difficulty has been superinduced by some physical condition. Nervous debility and the depleted energy from strain, attendant upon diversified professional duties have, in some instances, brought about a derangement in the motive powers of speech. That these cases do not frequently occur, is proved by the fact that eminent writers and investigators along the lines of speech defects say that stammerers, as a rule, experience no difficulty in singing nor in declamation. The pronounced rhythm carries the halting powers of speech evenly along without catastrophe. The writer, however, has had among his numerous pupils, several professional singers thus peculiarly affected. One singer who came to him for treatment, was a member of a quartette in a prominent church. This singer came in great perturbation of spirit, foreseeing an inevitable loss of choir position unless the malady was checked in its progress. The manifestation of stammering was in the marked inability to begin. It seemed as if the necessity of vocal utterance at a certain bar or count in the music, produced temporary paralysis of the vocal cords. As the stammering habit grew, entire inability to sing at the right time, increased with alarming rapidity. A loss of musical standing, as well as loss of choir position, faced the anxious musician; the anxiety only heightened the difficulty, which in all stammerers is intensified in proportion to the apprehension or worry.

A more common manifestation of stammering among musicians, is in the case of some players of musical instruments. In some way there is not a true coördination between the motive centers and the manual and digital muscles. Stumbling, and at times entire inability of execution, results. One case is reported of a young musician who had been carefully trained to accuracy and facility of technique. A change of residence brought the student during the formative period under other instruction. Poor judgment on the part of the new instructor placed the pupil before a large audience, without adequate preparation. The strain and fright so affected the pupil's mind that it was years before mental equilibrium could be maintained before an audience, the same emotions occurring and causing no end of difficulty.

There are cases of stammering in walking. Of one man thus afflicted, it is said that he could walk easily until he thought of what he was doing or until he became conscious of the attention of others fixed upon him. Then he moved, if at all, with most laborious effort.

Yet another manifestation of stammering in the manual muscles happens when certain individuals attempt to write, as in the case of those who cannot write their own names with facility when observed, or cannot form certain letters, inability of production through this avenue of expression being as uncertain as if attempted by the organism of the more usual types of stammerers.

It is noteworthy, moreover, that there is inability to write certain letters; those letters are invariably the same as are those whose sounds cause difficulty in utterance. It is not often that the affliction of stammering takes this form, but occasionally such stammerers present themselves for treatment. This habit of stammering in writing is entirely relieved by proper training.

Another case is that of a young man of thirty. Although his physical condition was very fair, he was, at times, extremely nervous and even melancholy. His stammering began when he was about five years of age and was

attributed to an eruptive disease,—measles. There was on his mother's side, moreover, an aunt who stammered. As a man, he found himself stammering most when it was imperative that he should speak fluently. In ordinary conversation, he experienced little or no difficulty. When not stammering, his articulation was clear and gave evidence of excellent mentality. Contortion of the facial muscles seized him when he met an explosive, or, as my "*method of attack*" words it, a *closed consonant*. Before treatment, he frequently resorted to some muscular movement to gain momentum for speech. For illustration, he had formed out of this need, the habit of adjusting and readjusting his glasses. While consonants generally presented the greater difficulty, he found himself at a standstill occasionally on vowels, especially in his own name, which begins with *A*. He seldom stuttered or repeated the first syllable of a word. If blocked by a sound, or in danger of being impeded, he immediately resorted to synonyms. Hence, in cases where no synonym was available, he hesitated, contorted his features and looked somewhat agonized in uttering the word. He was caused the utmost embarrassment when called upon to introduce people to each other for the very reason that there was no way around the names of those introduced.

A condition engendering stammering among children is, when a child is subject to the strain of learning to talk where several tongues are spoken. The following case is cited, from an authoritative source, as illustrative of this condition. "A case I met with in the course of medical practice, was the three and one-half year old son of a German father and a French-Swiss mother. The child was born in New York. Hearing three languages at once, as you may say, he developed an uncertainty and lack of concentration that lead to the spasmodic condition.

The act of choosing a word, whether it be from a foreign language or from our own, coupled, with the anxiety to get just the right word, produces a hesitation that is so near akin to stammering that it sometimes runs into



it." The same specialist writes as follows, concerning disease and stammering: "They (the causes) alight like sparks upon things just ready to explode. Such are the weaknesses resulting from scarlet fever and other exanthematous diseases. \* \* \* There are plenty of cases of stammering as a sequel to scarlet fever and diphtheria. Whooping cough may bring it on by the effort that the child makes to talk during the paroxysm of coughing."

One of the most difficult of recent cases coming to my knowledge during treatment, was that of a young girl of fifteen years who had stammered since she was four years old, as the result of whooping cough. Her home people did not realize that she was seriously affected when she was ten years old. At that time her trouble manifested itself mostly when tired or at the close of the day. This difficulty increased as her self-consciousness developed and at fifteen her difficulty to speak was most pronounced, especially in the presence of strangers. Her stammering was elusive and hard to get at. This is frequently the case with stammerers who make the least demonstration.

Another is the case of a journalist fifty-seven years of age, who began to stammer in infancy. In the family was one elder brother who stammered. This gentleman attributed his stammering to heredity and environment. His health was good and always had been, and he had led an entirely temperate life. Speaking before strangers, he underwent no particular embarrassment and could read aloud alone in a room fairly well. His manifestation of stammering was more in the lack of coördination between breath and vocal utterance than in any facial or other bodily contortion. In argument or formal speech, he experienced little trouble—even to the extent of giving evidence in the witness box for an hour before a full court, without hesitation. His greatest difficulty lay in the utterance of closed consonants and continuous sounds, while vowels occasioned no hesitation. On words beginning with *ch*, like *chinaman*, he found himself stuttering. When angry, the way of speech seemed to be flooded

by the impetuous force of his aroused will. In marked contrast to the average afflicted stammerer, this man's disposition was usually cheerful, extremely so among his friends, he being the opposite of a recluse.

The following is a case of very different origin, apparently, and different in its manifestations. It is that of a girl, thirteen years of age. Her manifestation of stammering was slight at times, leaving her at periods for months. Moreover, her difficulty was never perceptible away from home, a slight change of climate seeming to alleviate it temporarily. Overtaxing school work and broken health aggravated her stammering until she was very badly afflicted. When about seven years of age, a severe cold brought about rheumatic neuralgia and spinal irritation. These painful conditions seemed to invite the stammering which remained after one of the inducing causes had departed, the rheumatic neuralgia being intermittent. Her throat seemed full of nervous weakness, and her manner of breathing was wrong, her speaking voice seeming to grow in harshness and unpleasantness from undue effort at phonation. The words which occasioned her the greatest difficulty were those beginning with *w*, *wh*, *l*, *m*, *n*, *p*, *k*, *h*. On continuous sounds, there was the sound of escaping breath, and some stuttering accompanied her efforts to speak. However, when she did speak, her words came forth clearly articulated.

Another case of serious nature was that of a young woman of seventeen years—exceedingly timid, retiring, and of a nervous disposition. Her first memory of stammering was that of her early school room experience. Certain words at times caused her unusual trouble. At other times the same words could be uttered with ease. As she grew older, she acquired the ability to proceed for quite a time in narration and manifested no difficulty, simply because she steered clear of impending obstructions by the use of synonyms. Even some of her nearest friends did not know of her infirmity. Thus oftentimes in the quick quest of a substitute, the appearance of

ignorance was forced upon her by the use of the wrong word. She avoided speaking in public because of the paralyzing fear of manifesting her difficulty. Many a time she remained entirely silent rather than suffer the humiliation of stumbling and stammering. This was an exceedingly difficult case, for the young woman, with each failure, sank easily into depression.

A careful study of the different types presented will convince the reader that temperament, environment, heredity, health conditions, all join to make the sum total of each varying phase of stammering.

Here is an instance of a young woman, nineteen years of age, with good health and superior physique, whose speech difficulty was a very peculiar case of stammering. She had stammered slightly from infancy. To what her malady was attributable, her parents did not know—there were some remote maternal relatives, however, who stammered. At one time there was facial contortion when endeavoring to speak, but that was overcome before she came to me for treatment. Strange as it may seem to those not understanding the idiosyncrasies of stammerers, her trouble was most pronounced when talking with her mother. Her greatest difficulty was encountered on words beginning with *b*, *p*, *k*. She could sing with utmost ease and speak without impediment, when angry. Moreover, she could imitate the eccentric speech of others without any trouble. As a child, her people made the common blunder in dealing with speech defects—they trusted to the possibility of her outgrowing her defective utterance.

In marked contrast to this case, because the former gave little evidence of its severity, is that of a young Russian Hebrew, who had stammered from childhood. He was of exceedingly nervous temperament, undersized and subject to violent twitchings in the face when attempting to speak. It seemed as if he could never begin, and the only way one could divine that he wished to speak, was by the gasping mouth and twitching muscles, for no sound came

forth. Besides, he stuttered as well as stammered, and his stammering was elusive, not upon any particular sound or word, but here and there by turns. Unlike the ordinary stammerer, he stammered worse in argument, and always when in trouble. No one class of persons caused him particular embarrassment. All the way the road of difficulty and obstruction seemed to rise for him.

At the same period under treatment was another young man of very different type—different in temperament and environment. His age was twenty years. By occupation he was a rancher. His stammering manifested itself when he was about ten years of age. In his family was an aunt who stammered. Stammering is frequently caused by an eruptive disease, accompanied by fever. This young man traced his affliction to an attack of chicken pox. He could read easily when alone, but experienced extreme embarrassment in the presence of others. Instead of facial contortion, a certain paralysis seemed to grasp his facial muscles and he stood as if turned to stone—motionless. He suffered most from his impediment when asked a question in a room full of people—especially when accosted thus with ordinary daily questions, such as: "What is the time?" etc. Sometimes at table, when asked what he would have, he was like one struck dumb. By beginning with "*Oh,*" he found himself some times able to respond. Afflicted with harelip and cleft palate, this young man, trebly weighed down, suffered at times fearfully from depression. But in spite of his humiliating defects, his usually buoyant, cheerful spirit made his treatment easier than that of others whom a moody disposition handicapped.

It is noteworthy that those predisposed to stammering manifest this affliction somewhere in the first eight or ten years—usually at four or five years of age, when first the consciousness begins to awaken concerning speech as speech.

Here is the case of one who began to stammer when seven or eight years of age. This young man, at the time



of his difficulty, coming to my observation, was about eighteen years of age. Like many another, his stammering was traceable to heredity and troubled him not occasionally, but nearly all the time. He could read when alone, but in speaking to persons, he suffered from extreme tension and manifested this misdirection of effort in contortion of the muscles of the face, head, neck and extremities. In class recitation, he was very much beset by his affliction—nor could he speak without stammering while sitting or lying down. Speaking to persons in authority also troubled him greatly. In argument, however, he could hold his own fairly well. The sounds of *t*, *ch*, *k*, *p*, *q*, were the principal stumbling blocks to him.

All of these manifestations of stammering were present, in spite of the fact that the young man was of sanguine temperament and of normal physical condition.

An extreme case of the nervous type of stammering is that of a young man of nineteen, who inherited his tendency to the affliction from his father. His sister, also, was one of the most severe stammerers. Although there was an inherited tendency, he traced the direct cause of his affliction to mimicry. He spoke before strangers only with the utmost effort and embarrassment. He could not even read freely aloud when alone. In his efforts at speech, he suffered contortions of the body, painful to behold. When excited, or making business plans, his trouble was the worst. No words in particular bothered him. The whole realm of sounds, syllables and words, seemed by turns to present enemies to his utterance. When he tried to speak there was the sound of escaping breath, but, on the other hand, no stuttering accompanied his efforts. Although he was of nervous disposition, his health was fairly good. As he advanced in years, he noticed a marked increase in his malady.

There are, probably, as many different conditions in manifestation of stammering as there are different persons thus addicted, and each case, in a sense, is different to others and strikingly peculiar by itself. One case particu-



larly that I call to mind was that of a young Englishman who attended my institution some eight or nine years ago and who, in addition to stammering, suffered from muscular paralysis of the organs of utterance. Many of the sounds of the vocabulary were impossibilities for him; in fact, his talking resolved itself into a sort of jargon, with here and there an intelligible utterance, which, however, was accompanied by stammering. With patience we set about to overcome his difficulty, teaching him the correct positions of the organs of articulation for the enunciation of the elementary sounds. Tongue and mouth exercises, combined with vocal exercises, gradually established flexibility of the muscles, and this, coupled with the instruction which he received for the purpose of overcoming his stammering, gradually brought about the desired conditions, with the result that an absolute cure was finally effected.

There comes to my mind the case of a young man of fourteen years, tall, thin and of nervous temperament. This youth stammered because of hereditary tendencies. Two of his uncles were afflicted in the same way. He was not only overgrown, being over six feet in height, but very ill-proportioned, weighing only 122 pounds. For some time his people had him under treatment for enlarged tonsils, which were removed. As is the case with many persons not conversant with the causes of stammering, they attributed his difficulty to the condition of his throat, also to his abnormally large tongue. However, when his tonsils had been removed, and no apparent change for the better took place in his speech, they were convinced that the seat of the difficulty was neither the enlarged tonsils nor the unwieldy tongue. When reading, he experienced the greatest difficulty, and the particularly difficult sounds for him were those of *m*, *k*, *t*, *f*. Sometimes when he tried to speak he seemed blocked and could get no further. When he tried argument, he was worse than in ordinary conversation. Sometimes he was exceedingly irritable, and, undoubtedly, that was when his malady most grievously beset him.

A young girl of thirteen years, frail and of evidently very nervous temperament, came to me for treatment. She began to stammer when she was about four years old. It is to be noted that stammering usually manifests itself about the time the use of speech, or attempts at it, begin. Her stammering commenced following diphtheria, which quite undermined her already delicate constitution. She, like many another stammerer, was worst beset when there was pressing demand to say something. Her fear of uttering sounds was principally manifested upon *b*, *p*, *t*, *u*, *m*, *c*. When she attempted to speak, there was the sound of breath escaping. She not only stammered, but stuttered, for she repeated syllables at times with rapidity. The more she struggled to speak, the more nervous she became. With some persons she could talk without any apparent difficulty; with others, the trouble was extreme. She was not only nervous, but very excitable. Besides, standing as if dumb, she had a queer way of opening up the mouth as if *thirsting* for the word. Moreover, the blood suffused her face and neck in spots, accentuating the palor which came at her efforts to speak.

The following is the case of a young man who was in his eighth year before he began to stammer. His stammering was, undoubtedly, due to weakness and the consequent imitation due to playing in this condition with a boy who stammered. When this young man was a very little child he suffered from brain fever, which left him with paralysis of the right side, which was perceptibly smaller than the left. The paralysis forced him to use his left hand and also caused the extreme physical weakness that made him an easy prey to stammering. His affliction was always an annoyance to him. Although he stammered badly, there was no particular manifestation in contortion. Whether in conversation or argument, it made no difference with him. So mild was his disposition that his speech acquired no particular momentum from anger. Thus he differed from the majority of stammerers, who can speak better when angered. On the continuous

sounds, there was the hissing made by escaping breath. Moreover, he repeated rapidly, thus stuttering as well as stammering. Again, he would stay mute and seem unable to utter a word, or else mutter instead of articulating. When he attempted to speak, he showed exceeding nervousness.

A representative of a type almost diametrically opposite to the one just described, was that of a young man of twenty-one. He was a person of unusually good physique, but of uneven disposition. When he was far up in the scale of good cheer, those who knew him best were sure that the pendulum of his disposition would shortly, in a few hours, or even a few minutes, swing clear to the opposite extreme. When he was three years old he began to stammer. None of his family were thus afflicted, and the concurrence of opinion was that his defect was due to sickness.

His difficulty in speaking was the greatest at home or in the presence of intimate friends. When he tried to speak, there was a rapid escape of breath. Only a slight nervous spasm took place in the muscles of the face and no manifestation of stuttering. In his room he could read aloud without difficulty. When a very small boy, his people put him under treatment, but lacking the maturity of mind to see the importance of persistent practice in the right direction, he gradually lapsed back until at twenty-one his was a severe case of stammering.

The case of an Egyptian, who had stammered since he was five years of age, is interesting. As he was a person apparently temperate in all things, the only plausible cause of his stammering seemed to be sickness, for with him the stammering manifested itself later than the first acquisition of speech. In any use of the vocal organism in an effort to speak, he stammered. In fact, his case marked itself as extraordinarily serious, for he did what only the more afflicted stammerers do—he stammered when reading alone in his room. *Th*, *r*, *g*, *l*, *k* were sources of special difficulty for him.

The stammering experience of a soldier is quite different from the foregoing. His defect was caused by neurasthenia, and by a generally debilitated condition. He was fourteen years of age before he began to stammer. His chief difficulty lay in the following sounds, in their order of presentation: *d, b, t, c, k, p, u, d* being the hardest of all. His time of greatest difficulty was in the presence of those before whom he wished to appear at an advantage or where some matter of importance was at stake. He, moreover, found himself incapable of set speech, such as the participation in a prearranged debate, because his confidence deserted him in the time of stress. When he attempted to speak, there was either the sound of escaping breath or a hiss, with some attempts at utterance.

One case of stammering that particularly interested me was that of a man 40 years of age, and who had stammered from infancy. Unlike the majority of persons thus afflicted, this man was not one whit sensitive because of his difficulty, which was most severe. He apparently stammered on every word he uttered, sometimes a mere stoppage, resembling hesitancy, characterizing the difficulty, at other times a complete stop for the lapse of a minute or more. It was apparently a case of continued stammering, as change of surroundings or environment made no difference whatever either in increasing or lessening the weight of his burden. He stammered as much in talking with members of his own family as he did when conversing with strangers. Anger made no difference, either by way of increasing or retarding his fluency. He experienced the same trouble in reading that he did in conversation, in fact, there were no conditions that appeared either to lessen or to aggravate his difficulty.

Usually, and in the majority of cases, stammerers, find that there are certain sounds that cause them greater difficulty than others. For instance, one man stammers worse on the sound of the letter *s* than on any other, while another stammerer finds greater difficulty in producing the sound of *t*. Again, it may be, a number of letters



appear difficult, but in this case there were no particular sounds that were more bothersome than others. Sick or well, despondent or joyful, the trouble was always about the same.

Unlike many who stammer and who feel keenly sensitive because of their infirmity, this gentleman persisted in trying to talk. Stammer or not, he was going to talk anyway. He was an unusually pleasant fellow, all things considered, a man who naturally would draw out your sympathy, although he made no effort to do so because of his infirmity.

One cannot always tell from the manifestations of stammering apparent, the extent to which the difficulty has progressed. A gentleman living in Chicago, connected with one of the largest wholesale dry goods houses there, wrote me the particulars about his son, who, he said, as far as he could observe, talked perfectly, but who claimed to stammer. Subsequently, he brought the young man to my office for examination, and although I talked with the boy for at least an hour, I could not detect any degree of hesitancy or stammering. The young man's mother suffered from stammering, and he told me under certain conditions he experienced a feeling which seemed to paralyze his power of utterance. The condition of stammering, although never physically manifested to his father, had on many occasions, he said, crippled his utterance, and under such conditions, said he, "I am wholly unable to say the word that I wish to." "Of course," he continued, "I usually manage to get around the obstacle by resorting to the use of a synonym." This case was strikingly peculiar in that the manifestations were unusually mild; nevertheless, it was a case of stammering due to heredity, a case where the disease had been planted in the pre-natal life and, therefore, had all the conditions of the parent's stammering as a part of the condition of its own existence. The young man remained in my institution but a few weeks, during which time we succeeded in permanently eradicating every vestige of his former trouble.



A most interesting and peculiar case comes to mind as I write, viz., that of a young man who, in his childhood, had been slightly addicted to stammering. When about 9 years of age, he completely outgrew his difficulty and experienced no recurrence of it whatever until about his 26th year, when it returned suddenly, resulting from fright caused by a railroad wreck through which the young man had passed. Immediately after the accident, although fortunately he was not in any other manner injured, he found that he was wholly unable to speak without the most violent contortions. As the days passed, the severity of his difficulty did not lessen any, in fact, if anything, it became worse. When he arrived at my institution, he was almost wholly unable to make himself understood and when, after a few weeks of treatment he left for home cured of his difficulty, he talked of entering a damage suit against the company on whose road the wreck had occurred, although up to this time I have learned nothing further from it. This much I do know, however, that the railroad company endeavored to make a settlement with him, which settlement he refused to accept.

In looking over the reports of a large number of cases of stammering, not a few do I find who attribute their infirmity to fright. When that fright has been accidental, it is to be deplored. When the child has been the victim of fright resulting from the nagging or worrying spirit of the ignorant, it is little short of criminal. Those who have come under my personal supervision for treatment, have related experiences out of their own pitiable past that should make every protector of little children vigilant.

One of the most stubborn cases coming under my treatment was that of a young southerner—a man of unusual attainments. None of his antecedents stammered. He attributed his affliction to fright resulting from a fall. At the time of his treatment, he was thirty-five years of age and he had stammered since he was nineteen years old.

Stammering has very many times been attributed to fright, where most probably the fright attributed as the

source of the difficulty was but an aggravation which developed a condition which had existed in the beginning, but which might never have manifested itself had it not been aggravated. The foregoing case, where the condition lay dormant for nearly twenty years, is evidence of the correctness of this claim.

There is a peculiarly impulsive type of stammering which is frequently accompanied by stuttering, a conglomerate mass of inarticulate sounds being projected when one thus afflicted attempts to speak.

The elements of speech, though present, are in a chaotic condition, and the stammerer, endeavoring to speak, makes spasmodic efforts to breathe, substitutes sounds, stumbles, tangles up his expression and pushes ahead. From one pitch of voice to another he rushes on rapidly, physical contortions accompanying his distressful efforts.

A young man living in New York presented himself to me for treatment a number of years ago. His grandfather, whom he had never seen, was a confirmed stammerer, a man of some 60 years of age, who had stammered since early childhood. The young man had grown to the age of 18 years and up to this time had spoken fluently, without any apparent fear or indication of stammering. Some time previous to his entering my institution he attended a theater where one of the actors impersonated a stammerer, and this seemed to strike the young fellow as particularly amusing, so much so, in fact, that he endeavored, upon returning home, to relate the amusing incident to his parents. But alas! the poor fellow found that he could do it with too much reality—he himself had contracted the stammering habit and was scarcely able to speak. The dormant condition of stammering, planted in the prenatal life of the young man had been aroused, and stammering had developed with all its attendant train of woes and miseries. Surely, he had paid the penalty of his sin of mimicry. In this particular case without imitation, stammering probably would never have been manifested.

Although all stammerers are more or less sensitive, there are some who suffer so deeply that they might be termed sensitive stammerers. Their natural timidity is increased with every new humiliation experienced in trying to talk. Such afflicted ones impose silence upon themselves rather than undergo the torture of exhibiting their halting speech. With many of this type, there has been a lifelong struggle, the stammering habit having deepened day by day from early school days. Teachers, ignorant of the nature of the malady, and some over-severe in methods used with these sensitive, shrinking pupils, required more than they realized.

The sensitive stammerer is, perhaps, one of the most interesting. When I speak of the sensitive type, I refer to a class of persons who stammer but little, in fact, so little that many of their friends do not know that they really do stammer. Such stammerers become adept in the use of synonyms. You can scarcely stick them, so keenly alert are they. Reading aloud to others, bothers them particularly, because under these conditions substitutions are impossible. An interesting case came under my notice a while ago, when a young lady applied to me for treatment. In conversing with her I could detect no difficulty whatever in her talking, in fact, it was only after the most trying test that I compelled her to stammer, and then the manifestation was but slight. She stated that she was not physically strong and that the constant mental battle that she was compelled to fight to keep from manifesting her affliction was fast making of her a wreck. This, in a measure, was true. Extremely sensitive, with a particularly excitable temperament, such stammerers are constantly worried, which in extreme cases sometimes results seriously. There are some cases of a mild type which belong to this class, that receive absolutely no sympathy. Their friends will not believe that they who stammer suffer, their parents throw cold water upon all efforts to cast off the burden, and the unfortunate one thus afflicted suffers in silence and alone, the otherwise cheerful,

sunny disposition becomes sour, in fact, the whole disposition becomes alterably effected. Some such unfortunate persons have asked me what I would do under such circumstances. It is needless for me to state, as it must be apparent. When a cure in such mild cases is so readily accomplished, I would make any sacrifice rather than go through the world a stumbling block to myself and a burden to others.

One class of persons who stammer will continue to suffer unless they view matters from a different standpoint. I refer to the skeptical stammerer. The lack of confidence, deeply founded because of repeated failure in speech, gradually pervades the mind in other directions, until the whole personality seems to be tinged with doubt and lack of faith. Those with whom the skeptical stammerer comes in contact, are liable to suspicion until proved to be friendly. The skeptical stammerer is apprehensive in the extreme, lest someone may get the better of him. Persons of this type are difficult to treat successfully.

A young man wrote to me some years ago and stated in his letter that a friend had induced him to investigate my work but that he had reluctantly consented. He stated that he had been humbugged once and that he didn't propose to give another a chance to "dupe" him. Other similar expressions contained in his letter left no question regarding his attitude. In his opinion (which was not humble, by any means,) no person could be cured of stammering, those engaged in the treatment of stammerers were a pack of "frauds," "inhuman ghouls," and while he was ready to receive a letter from me, he would state before receiving it that he had no confidence in my institution nor in any other. It is needless for me to say to those who know me that I threw the letter into the waste-basket. One who wishes to be cured of stammering must view the treatment with utmost confidence. In ratio to this confidence (so essential) will their efforts be crowned with success. I have never known of one



person to be cured of stammering who lacked confidence in the result of their efforts. I have never known of a single failure where there was absolute confidence backed up by effort and determination.

Every authority on stammering and stuttering speaks with special emphasis regarding the value of confidence to stammerers who submit themselves for treatment and cure.

I remember well, a young lady who stammered pitifully applied to me for relief. Her contortions and painful efforts to speak were most embarrassing, not only to her, but also to others with whom she endeavored to converse. So aggravated was her condition, that it resembled at times St. Vitus's dance, the dreadful contortions of her face seeming to indicate a fierce battle within. One would suppose, from observation, that stammering as difficult and as aggravated as this would prove stubborn to eradicate, and I am convinced that such would have been the case had it not been for the implicit confidence of the sufferer in the efficacy of the methods which it was her intention to follow. Speaking of her cure afterwards, she said that she had never once questioned nor doubted regarding her ultimate and final success in overthrowing the demon that seemed to hold her down. She believed implicitly that she would be cured, and, strange as it may appear (it is nevertheless true), this young lady never again stammered after she entered upon her course of treatment. That was five or six years ago, and, to my personal knowledge, she is today talking perfectly without the slightest evidence of her former awful impediment, nor would one suspect that she had ever stammered. That the cure in the beginning was largely established because of such perfect confidence and absolute belief, there is little doubt.

I have many times been asked to define stammering, and there have been many definitions written, but leaving aside all technicalities, a very simple definition is, *lacking confidence*. These two words signify in a nutshell very largely the condition from which all stammerers suffer.



At earliest childhood the prattler learns that others can speak as he cannot, and as he grows older he learns that because they can speak the words that he is apparently unable to utter, they can, because of this fact, do things which he is unable to accomplish. The two conditions appear to go hand in hand. Naturally from this condition, since he is unequal to the task of accomplishing what others can, the stammerer regards himself as unequal. A feeling of moral cowardice possesses him; he shrinks from the task of utterance, unshoulders his burden upon others, changes the construction of his sentences, uses synonyms, avoids difficult words, and one way or another, by hook or by crook, manages to get along. Who can wonder that one who is thus handicapped becomes sensitive, loses confidence in himself, oftentimes withdraws entirely from social intercourse, and by his reserved manner, his inability because of his infirmity to launch forward into undertakings that would mean a success were he able to speak as others, he settles back in repose and allows others to step into his position.

There are thousands upon thousands of stammerers who have suffered these (to the majority of people) unknown miseries, a condition that has wrecked many lives and which has deprived the sufferers of great opportunities.

Who, then, can deny that stammering is manifested in lacking confidence? You who stammer and who read this book, make up your mind to do one thing—*believe*. In a sense, before you can hope to be cured of your infirmity, you must be born again. The lacking confidence which is naturally yours, from the fact that it is in part the condition from which you suffer must give way to absolute belief. Fifteen years ago I stammered so terribly that it was difficult at times to understand what I endeavored to say, and most painful at all times to witness my contortions. Today I am entirely cured, permanently relieved of my infirmity. I speak as fluently as one who has never stammered—more fluently than some. This fact should

serve to inspire the doubtful with confidence. But this is not all. Hundreds have been cured by following out the principles with which I cured myself of my infirmity. These stand ready to testify to the efficacy of the methods pursued. What has been accomplished in the past in this respect, and is being accomplished in the present, is surely worthy of repetition. Any case of stammering or stuttering, I care not how severe, provided there is application and intelligence to back up the exercises and instruction, may be entirely and permanently cured.

The majority of persons who stammer are naturally anxious to overcome the difficulty, but there are a few here and there who, apparently, are satisfied and seemingly contented to stammer through to the very end. It has always been so, and probably always will be, not only in the matter of stammering, but also in other matters where an affliction of the body or mind is concerned. There are those, however, and plenty of them, in fact, the large majority of stammerers and stutterers are self-concerned and anxious to break away from the chains that bind them captive. To such I give an assurance which, it seems to me, should serve as encouragement. This assurance and assertion is made and based upon the supposition that the patient will be willing to put forth self-effort, which granted, the cure is usually not by any means difficult to effect.

There is one class of stammerers that, in spite of years of struggle for freedom and fluency of speech, are nevertheless hopeful and usually ready to see life's bright side. Stammerers of this class are (in spite of adverse conditions) optimistic. By their brave example, they compel us to realize the truth of Tennyson's lines where he says:

"This truth within thy mind rehearse:—

That in a boundless Universe,

Is boundless better, boundless worse."

The willingness of the pupil to coöperate enters into any treatment for the cure of stammering as a mighty factor in determining results,

There are, of course, a great many different kinds of students in the modern, up-to-date institution for stammerers—all classes, rich and poor, robust and delicate, enthusiastic and indifferent; in fact, gathering its students from all classes of society and from all walks of life, from every quarter of the civilized world, the go-ahead institution meets every condition conceivable. In determining results for any particular class from among those who submit themselves for treatment and instruction, it is necessary to subdivide the whole, which I would classify as follows:

(1) Those who are in earnest and who purpose to do everything they are told to do.

(2) Those who are in earnest and who purpose to do everything they are told to do, and who mean to do nothing they are told not to do.

(3) Those who are in earnest and who purpose to do everything they are told to do; who do many things they are not told to do, and who refuse absolutely to do those things that they are told not to do.

Stammerers belonging to the first division, generally succeed; those belonging to the second, meet with still better success, while those belonging to the third, more than realize their anticipations.

We are rewarded in this world in any undertaking into which we enter largely in ratio to the effort we put forth.

A two-dollar-a-day clerk never receives a raise in salary until he demonstrates to his employer that his services are worth more. If he works to give the employer "two dollars worth," he remains a two-dollar man. The man who enters the stammering institution, and who does just what he is told to, without any additional self-effort or originality is, of course, a better student and more likely to succeed than the one who neglects those duties that are assigned him. Still he remains a "two-dollar man," and his cure is advanced much in ratio to the effort he puts forth. He who makes the extra self-effort, and who asks for advice in this respect to guide him in his work, will

surely succeed best. He is the kind of a man who rises from door boy to manager, who rises from newsboy to congressman, who possesses some originality and is ready to test his views, who does everything he is told to do, and who refuses absolutely to do those things that he is told not to do. This is the ideal student, the student who succeeds not only in overcoming his stammering, but who also succeeds in any undertaking in life into which he enters.

While the sorrowful stammerer, by his daily life refutes all belief that there may be a "boundless better" ever to be enjoyed by him, he seems, by his very attitude of forlorn hopelessness, to say with that other voice:

"Thou art so full of misery,  
Were it not better not to be?"

His wakeful nights are doubly dark because of mental depression, and each new day is dreaded because of his load of fear and despondency. He is enthralled by moods and whims which precipitate his spirits into murky depths whence a weakened will seems powerless to lift him. This type seems exceedingly erratic, some maintaining a sorrowful yet reserved manner toward associates and friends; others, habitually burdening with a gloomy recital of the ills of life, those who will listen.

There is no work in the realm of teaching more dependent upon responsiveness than is the cure of stammering. The man or woman who applies for treatment and, after making all necessary business arrangements, seems to settle back and assume an air of, "Here I am—cure me, if you can"—has opened the first door for failure. Somewhere it says: "The readiness is all." It may not be *all*—but it is a large factor in the accomplishment of any result, especially the cure of a speech defect. Stammering cannot be cured without the patient assuming such a mental attitude. Responsiveness, which means a quickness, an alertness to seize every suggestion of help from the teacher, is really smoothing the pathway on the road of cure. The writer recalls one very difficult case which



negatively illustrates this quality—by the lack of it. The man referred to, was very earnest, but submerged in gloom; the habit of years, brought on by his repeated suffering because of stammering. Meeting him in the morning, any endeavor to give cheery greeting was thwarted, for he slipped doggedly by with lowered or averted head. In the class-room his attitude was quite the same. Encouraging words from the instructor fell on barren ground, as far as this stammerer was concerned. He looked away, as if all that was cheerful or hopeful concerned not his case. *He* was beyond the pale of success! And because of holding right on to that state of mind, he divorced himself from the good and progress his neighbors were achieving. This fault should, however, only be condoned. The pity was that, especially in view of his speech defect, which naturally depressed one of his shrinking nature, that some one had not, in the years when habits were forming, helped him out of himself—into the light of things.

The stammerer who has arrived at maturity unrelieved of his affliction, seeing the world's prizes and advantages in every one's hands but his own, comes to view success on the bias. Other men, with far less mental endowment, pass him in the race—the office boy (his junior by years) works up and is put above him. Again and again stammerers relate these chagrining episodes in their lives and the listener readily discerns whence has sprung the bitterness. Only such know how bitter are the waters of failure, and all the wrong attitudes of mind that spring up because of these failures.

The question immediately arises: "If I have come to maturity, a stammerer with habits formed, and some of them, as you say, enemies to my possible cure, what am I going to do?" This is by no means an easy question to answer. It brings us back to one of the first assertions made concerning stammerers. There is a weakness of will in those directions where there should be strength. He who is responsive, for instance, opens the door of his mind



to influences from without. He who is cheerful, opens the door to bright and wholesome thoughts. His will is strong in grasping the positive. In one sense, he chooses to walk on the sunny street of life instead of in the gloom. There is always this hopeful side of life, that habits, though formed may be reformed, and the influence of cheer is so positive that very soon its work shows when the will says, "out with darkness, in with light." The stammerer is, figuratively speaking, walking down an avenue which has many divergences. His natural quest is for relief from his humiliating trouble. The roads are two—cheer and depression. If he chooses the former, immediately he sees ahead of him many possibilities. All the good of life seems possible. Powers latent before seem to spring into being and the voice of "*I can*" dominates his work.

There are some stammerers who present quite the ordinary symptoms of stammering, whose utterance is made more disagreeable by its nasal quality. The stream of vibrating air which, when properly taken up and echoed by the chambers of resonance, becomes voice, upon issuing from the larynx is deflected from its proper echo chambers and a very unpleasant element has accentuated the affliction of the speaker.

Very well do I recall one pupil under treatment who was an excellent example. It was one of those cases where human nature seemed to have more than its share in the way of defects. Besides stammering, there was harelip and cleft palate. This young man's stammering began at the age of ten or eleven years. Though subject to depression over his difficulty, he would gather himself together and work heroically on what was prescribed for his case. What he accomplished, was the product of energy and earnestness. His was an unusual case, in that the energy and appreciation of all that a cure would mean were commensurate with the degree of his trouble.

Those stammerers who will not concentrate their powers, thus meeting the instructor half way, are the intan-

gible cases. The teacher touches no responsive chord—and the relief that might be afforded cannot take place for want of hearty coöperation. A faithful adherence to all that is required is necessary to get out of the labyrinth of stammering into the open arena of untrammelled speech.

Wide experience in the treatment of stammerers convinces me that concentration of mind is seriously needed by stammerers as a class. I am speaking of the average stammerer. Inability for continuous occupation is surely a fault of this class. Probably this has given the stammerer the name of instability of opinions as well as of speech. There is no doubt but that mental concentration is the product of education. A halting, a stammering not due to inability to utter formulated thought, is present; there is a mental groping for the right thing to say. Where a tendency to stammer is accompanied by this lack of formulating thought before attempt at utterance, the case is difficult to handle. This, as heretofore stated, is frequently the cause of stammering in the case of exceedingly bright children. Whether in adults or children, this form of stammering seems to be induced when there is a tendency of the mind to generate thoughts more rapidly than they can be uttered. A futile attempt is made to express them all. Like a confused crowd of eager persons pressing and pushing for exit through a door or gateway, it is uncertain which will find egress first. Jumbled and chaotic utterance puts to flight the ability to place one thought clearly and definitely before the listener. Repeated experiences of this kind bring to the person a conviction that he cannot speak without stammering. His mental activity is in excess of his power to control speech.

Previously have I stated that the nervousness of stammerers is due to their malady. There is, however, one type of stammering which takes its rise from nervousness. Exceeding weakness in childhood, caused by sickness or too rapid growth, develops this constitutional form of the malady. All the muscular actions of persons thus afflicted are liable to be characterized by a spasmodic

irregularity. A similar uncertainty marks their efforts in speaking. The exhaustion arising from useless muscular activity, continually saps the already weakened nerve force. The nervous forces of the body so completely lack coördination that a complete physical wreck is often the result of these grievous conditions.

A young woman who came under treatment, illustrates this type of the difficulty in a forcible way. Naturally very nervous and frail, her progress toward a cure was hampered by her constantly starting to speak without having thought beforehand just what she wished to say. One at a distance, hearing her trying to talk, could readily detect a double cause for her halting speech. In fact, the larger part of her trouble was, undoubtedly, due to aimless talking.

A young mother who entered my institution for treatment, expressed to me her dread lest the little daughter at home should develop the tendency to stammer, which in a slight degree, unnoticed by the child, was manifest. Much as the mother desired the child's companionship, I advised her not to have the child with her at the school, nor to recognize in the child's speech anything peculiar. On the other hand, I urged her upon her leaving the institution, speaking easily herself, to place around the child every physical and mental safeguard. She saw, from her own requirement, the need of physical training leading to control. She learned that all undue excitement must be warded off from her child, moreover, that the little girl must, without any reference to stammering, be taught not to speak when excited or tired until she could control her breathing.

Important as these lessons are, and as simple as they may seem to those who have studied this matter, they are lessons, the adherence to which would keep many a one from the anguish and distress of stammering.

There is another phase of the subject which is always more or less delicate as to discussion with parents, for each family usually thinks itself able to manage and con-

trol its own children, but what I actually know from sensitive stammerers who have, under embarrassment, told me their life experiences, leads me to believe that some parents are unwittingly too severe.

A very earnest and conscientious professional man once told me that he felt sure that his father's severity aggravated his difficulty. Many a time when his father, an exceedingly strict man, harsh even in his old-world notions of family rule, spoke to him abruptly, for several minutes he could not speak. From childhood into manhood the dread of father's rule, which paralyzed his power, followed him. The wrong to the child is self-evident. There are, as every thoughtful parent will agree, two marked extremes in the methods adopted for the management of children, the one, above, which paralyzes the will of the child and makes him a thing, not a thinking, *willing*, feeling being; while, on the other hand, there is lawless freedom which others give children that their *individuality* may not be marred or warped!

What a wrong to any child—how unfortunate for him to fall under either dominion, especially if he be a stammerer or even if he have a tendency to stammer. Those who have given intelligent attention to the subject, know that in the very nature of the defect, the education of the child should have full attention paid to the right formation and direction of his will-power. The *will*, as exercised in speech-control is well adapted to an illustration along the lines of electricity. We have before us a machine with two brass balls at one side; at the beginning of the starting up of the machine, but a small distance apart. With the slow revolution of the glass discs of the machine in frictional contact, a faint crackling is heard, then a tiny spark leaps out from pole to pole (between the brass balls.) With the increase in speed the power increases and a veritable arch of light gleams between the poles of the machine as the force grows in intensity. Now let one of these poles represent the organs of articulation, the other standing for the brain centers concerned in speech produc-



tion. The weak *will* of the stammerer is the low power of the machine, which does not enable the electricity to bridge the distance; the  *motive* power, as yet not equal to connecting the two. Educate the will, incite the courage of the stammerer, and his power increases to flash the mental desire for speech out along the nerve fibres to the very organs of articulation.

All stammerers know from experience that different mental states are productive of correspondingly different degrees of intensity in their impediment, certain conditions of mind affording comparative freedom of utterance, while other conditions are productive of difficulties approaching absolute dumbness.

One stammerer that I recall was no exception to this rule. For years he had been stammering with varying degrees of intensity—sometimes very badly, and at others almost wholly free from a trace of impediment; yet he had never awakened fully to the realization that what had heretofore proved a temporary relief, dependent upon circumstances, might by systematic effort, constant watchfulness and exercise of will-power, be made a permanent state of affairs within the control of himself alone, and not subject to the extraneous conditions.

When this young man commenced to awaken to the realization of the truth of what is stated above, and when he began to make application of it (his chief constant aim, from that day forth,) his improvement was rapid. I am inclined to think that the resolution itself had a good deal to do in the working of the transformation. Did you not ever notice that when within the pale of irresolution on any one particular matter, how your entire daily life seems to be more or less vacillating in purpose, not necessarily to any grievous degree, but the whole sufficiently affected to give a feeling of extreme discomfort, whereas, a resolution in respect to the matter held in doubt has seemed to vivify and change the tenor of everything? This brings us to reinforce another point, and that is the advantage of forming a resolution to be cured

of stammering. With this resolution, never to stammer again, firmly fixed in mind, jealously guard and foster every possible help toward cheerful, courageous, confident states of mind. Cheerfulness under all circumstances is necessary.

There is no danger of exaggerating the importance of right states of mind, if one desires to be cured of stammering. Fear paralyzes the motor power even of those whose speech is normal. Gloom benumbs the energy. An acknowledgment that one lacks force, is in itself a lack of force. A positive assertion of ability, coupled with honest effort, sends through the veins a new life-current. It is everywhere generally conceded that the physiological action of fear is most injurious, while the transforming power of courage and joy are well-nigh miraculous. And how may these attributes be encouraged and strengthened? By normal exercise in the air and sunshine;—by engaging, in absorbing work, a reasonable number of hours;—by associating with persons of normal temperament who are sanguine and helpful:—by cultivating a friendship with books that look hopefully on life's progress;—by making all means of culture serve in perfecting strength of character: these are adjuncts which will help the stammerer along the road to cure.

Sometimes the phrase, "state of mind," or "states of mind," frightens the beginner in the study of mental conditions. From time beyond memory many a one has heard the oft-quoted proverb: "As a man thinketh in his heart so is he." He who has ever stammered, but who knows the joy of overcoming this condition, knows that this proverb is of the utmost significance. He knows that the man or woman, constantly possessed by the thought that he or she cannot speak, is dangerously near the stammerer's condition, if he is not already there. He knows, too, that he will never be *safe* nor free until the *mind* has faced about to a new point of view.

The all-important question in the stammerer's mind is: "How am I to do this?" Although the author has fre-

quently written on this question, the importance of it will make it pardonable to enlarge upon it.

It will be absolutely necessary for the stammerer to keep in companionship those thoughts which inspire courage, confidence and cheerfulness. Let it become the habit of his life to seek out public speakers who radiate those elements of character he feels that he lacks. I would like to underscore this advice in the minds of my readers, for the tendency is for those who have hit hard on the ragged rocks of fate, to read and listen to those who say, "That is life, what more could you expect?" and like the hoarse roar of the breakers, they echo his devitalizing sentiments by such exclamations as, "That is fate!" Such a one is either ignorant of universal law or has forgotten in his fatalism or pessimism what he once knew. What a difference between these responses and such as Horatio W. Dresser might make to such a voice of mental distress. In many chapters of his work, "*The Power of Silence*," he seems to speak directly to those afflicted as stammerers are. He would remind us that "Law is universal, absolute. Every effect has its cause. [Let the stammerer remember this.] As we sow, we reap. Here are the simple facts of life. No striving, no effort of will or thought can escape them. We forget that the law of sowing and reaping applies not merely to putting the hand into the fire, but to the *thoughts*, the *spirit* we send out into the world."

This leads us to touch again upon another point, important to all who would be free from stammering. Those who sow bad habits will reap misery and weakness. Intemperance of any form will be the undoing of any who are addicted to stammering. Annie Payson Call, whose book, "*Power Through Repose*," I have so frequently placed in the hands of my pupils, says: "There are many petty self-indulgences which, if continually practiced, can do great and irreparable harm in undermining the will. Every man or woman knows his or her own little weaknesses best, but that which leads to the greatest

harm is the excuse, 'It is my temperament; if I were not tardy, or irritable, or untidy,'—or whatever it may be,—'I would not be myself.' ”

The author at no time loses sight of the fact that the education of the will is by no means an easy matter. But there is this to be remembered: nothing worth while is accomplished in a day. If each day finds the stammerer resolute in building up habits of strength, endeavoring to acquire more fully the habit of concentrating the mind, results favorable to his highest welfare will ensue.

The following is the case of a young woman twenty-one years old who began to stammer when about seven years of age. Neither parent stammered. Her difficulty in speaking was attributed to fast talking. Although she stammered severely, whenever she stopped and controlled her speed in talking, she did fairly well. Bodily manifestation of difficulty, aside from speech, was noticed in the winking of the eyes and the general physical tension. When making purchases her defect troubled her greatly. With the exception of frequent headaches, her health was very good—and aside from a consciousness of nervousness in speaking when excited, she was not conscious of being nervous. Ordinary conversation troubled her more than argument, and the most difficulty was experienced on words beginning with *c*, *g*, *k*, *s*, *t*, *p* and *b*. On certain sounds, the effort of production caused a hissing sound. A rapid repetition, (stuttering,) also troubled her at times. The influence of heredity showed plainly in this family, for the cousin of this young woman referred to, suffered even more than she from the affliction. She could not utter two words consecutively without a struggle, and this struggle often marked by painful facial contortions.

A young woman of about twenty-three, well-born and educated, but with a disposition to stammer, inherited from her mother, was placed under my instruction. This young woman began to stammer when a very little girl. She could read aloud by herself without trouble. There was no facial contortion save a little quivering of the



mouth. Her greatest difficulty was experienced when reading before a crowd and in talking with strangers—as well as when excited. Argument troubled her more than ordinary conversation. She experienced more trouble on vowel than on consonant sounds. An unusual point in her case was the fact that her impediment was marked when angry.

The following case shows how variable is the influence of heredity. A man of fifty years, of apparently robust health, yet nervous, had stammered since earliest infancy. His father was a stammerer, as was his uncle on his father's side. The sons of the uncle were likewise afflicted. While none of the three children of the man in question had, as yet, developed any speech defect, the father gave particular evidence of being severely afflicted. His greatest difficulty was when angry or excited. Usually, as is well known, fluency of speech is restored under these conditions, the excitement acting as a motor stimulant.

Inherited tendencies are, in some instances, late in developing. In the following case, stammering might never have been manifested had the proper training and care to the development of speech been given. A young woman, twenty-four years of age, began to stammer when she was twelve years old. Her father stammered slightly, his father being subject to a hesitancy in his speech, though only slight. The immediate cause assigned for this young woman's stammering, was weakness, a general physical debility, together with extreme sensitiveness. It troubled her more to speak to strangers than to her own people; more in conversation than in argument. As to sounds, those of *m*, *l*, *b* and *r* were her stumbling blocks. At times she could not speak at all. Even when angry her impediment manifested itself somewhat. She was, of course, very nervous and showed this by her rapid talking.

The diversity in manifestation in the cases cited shows that speech defects have as much variation as other characteristics inherited. The gravest results may be feared

when a child, predisposed to stammer, is brought at a tender age in contact with influences conducive to stammering. In guarding children against speech defects, too much cannot be said to those concerned for their welfare. It is a point that can hardly be emphasized too strongly—that parents should not allow little children to live with, nor stay for any length of time with, stammerers. When either parent stammers, this injunction presents a serious side, for it unmistakably means separation of parent and child. But regard for the life-long welfare of the child, should make the injunction imperative. The child of average intelligence possesses an imitative faculty that with a predisposition to stammer back of him, may prove a curse. Even in families seemingly free from ancestral taint of speech, there may be a tendency needing only that mental impetus known as mimicry to develop pronounced stammering.

Here is the case of a young woman who stammered from babyhood. But why shouldn't she? Her mother stammered and her brother, besides an uncle. Her attempts to speak were accompanied by nervous movements of the jaw and twitchings of the body. Two trying situations always confronted her, the introduction of people and participation in an argument, while a large array of sounds occasioned her difficulty. Words beginning with *b* and *m* occasioned the most trouble, then followed *h*, *k*, *l*, *w*, *d* and *r*. Trouble with spinal nerves rendered her unusually nervous and, no doubt, aggravated the trouble in her speech.

A Scotchman of nervous, impulsive temperament, inheriting from his maternal grandfather a tendency to stammer, began to show the same defect in his speech at seven years. His attempts to speak were marked by twitching and drawing of the muscles of the mouth, eyes and neck. Isolated words like "yes," "no," "please" or "here," troubled him exceedingly. Words beginning with *gl*, *st*, *esk*, *gr*, *ro*, *wa*, and *ar*, were most difficult for him. To some he could talk with ease, while others knew him

as a stammerer, even to the degree of standing transfixed at times.

The daughter of a stammerer had experienced trouble from childhood, but never enough to occasion embarrassment until along in mature years. In fact, she had never been known to stammer in public, although her position brought her frequently before audiences. The difficulty began to develop rapidly after stumbling on the hard sound of *c* in the word *cripple*. A condition of fear was set up which aggravated the nerves until other public experiences caused deep apprehension. Being naturally of a melancholy disposition, the defect grew by what it fed on—reflections on the embarrassment encountered.

It seems, from the statements made by these persons and countless others in connection with predisposition, that one can form no idea as to what the effects of heredity will be. There is one point that one, unacquainted with data and without wide experience among those with speech defects might think settled—that is, the more stammerers there were in preceding generations, the more severe a given case in this generation might be. But that does not follow. Here is an instance: A young girl of fifteen who had stammered since she was three years of age, had two grandfathers and two uncles who stammered, and yet her case did not present as many signs of severity as some others. There were a great many sounds that troubled her, and she stuttered as well as stammered, but there was no muscular contortion of face nor body.

It has been said that in cases of inherited tendency to stammer, the condition usually has some immediate cause, as in the case of this girl sixteen years old. From her mother she inherited a disposition to stammer, but she was eight years old before the difficulty manifested itself through fright. She stammered all the time, her efforts to speak being accompanied by more or less muscular tension. It troubled her greatly to speak in a crowd, or when excited, tired, or angry. Sometimes she could not speak at all, sometimes she stuttered.

A young woman of nineteen had stammered ever since she began to speak. Her father also stammered when he was young and his father stammered. She had evidently grown up hearing her relatives struggle to speak, for she attributed the development of her affliction to mimicry. Her way of describing the struggle through which she passed to evolve speech, expresses well the effort: "I gasp for breath and move my whole body in misery." On the other hand, she experienced the throes of silent stammering—at times standing dumb, unable to speak; at other times the syllables and words flew forth with rapid reiteration, her difficulty being added to by stuttering. And yet she did not realize that she was of very nervous temperament!

Suffering from a form of stammering, not aggravating in its manifestations, are those who, in no strenuous manner, indicate their struggles to speak. Transfixed and dumb, they stand in the presence of questioners, neither muscles, eyelids, nor sound marking the effort to speak. This form of stammering is somewhat like the intermittent type. The afflicted, however, suffers from a certain harrassment of the nerves, in a lesser degree experienced by all stammerers. Sometimes he can speak fluently, at others, articulation is blocked and he stands dumb. On account of the variation in the degree of difficulty, the foregoing resembles intermittent stammering, which is one form of the constitutional speech difficulty.

In cases of intermittent stammering, the severity of the malady varies in direct ratio to the health and general physical condition. Excellent health and vigor report themselves speedily in the improved speech of stammerers of this type. Weeks may intervene with but slight manifestation of any impediment, while an attack of sickness, or general indisposition, brings back the old difficulty.

A man forty-two years of age had always stammered more or less. Although neither of his parents were so afflicted, his grandfather was a stammerer, as well as an



uncle on his mother's side and one on his father's. This was not a severe case, the difficulty manifesting itself only occasionally—as in speaking across a room or at table. The difficulty was variable as to sounds causing stammering. Sometimes it was one sound, sometimes another. His defect was at times what might be termed silent stammering, at other times intermittent stammering, his attempts to speak usually being so thwarted that he stood dumb.

The case of a youth eighteen years of age, illustrates the manner in which the effects of heredity show through families, with interruptions as to generations. This boy began to stammer at two years of age with his first attempts to talk. His grandfather stammered slightly. The manifestation of the boy's difficulty was largely when trying to tell a story. It seems that when two years old a sickness weakened him and he began to stutter. This condition continued until he was about twelve years of age, when a hesitancy developed and the form of his defect changed to stammering.

Oftentimes, in a stammering institution, there are pupils under treatment who are hoping brothers or sisters may have help later. One of the very worst cases ever addressing me for relief, was a young man whose sister was similarly afflicted, both inheriting the tendency to stammer from the father. Both children were subject to facial contortions. The brother presented deplorable manifestations of his malady. Besides facial, there was bodily contortion, that altogether made him for the time being, most inferior and pitiable to behold.

#### CORRECTIVE MEASURES FOR STAMMERING CHILDREN

Why dwell longer upon these various cases showing the serious effect of heredity? If the tide of such an influence is so far sweeping, will it not go on its way in spite of anything we can do? That is the point to be given earnest reflection. Training and environment, to-

gether with treatment to eradicate defects have much to do with eventually extirpating an evil. It behooves everyone, guarding the highest welfare of little children, to protect their speech, especially if there lies back of the present any suggestion of defect in speech. Even the slight defects, like small clouds, are liable to gather with intensity. If any difficulty appears with the beginning to talk, every energy should be bent upon its immediate eradication. There is no time so opportune as that of adolescence. Stammering or stuttering in childhood, however slight, is a danger signal which should be heeded at once. Every year accentuates the difficulty, as a rule. The child who stutters, is at a critical point. It should be most carefully trained *away* from the greater impending affliction of stammering. Each added year deepens the wrong habits of speech, mental and nervous complications increase, self-consciousness adds to the difficulty and a wrong, grievous indeed, has been done to the future welfare of the unhappy, handicapped sufferer.

I would not be considered as censuring those who have little children in charge during the formative period of speech. I write this not to criticise, but to enlighten and to cause those to reflect who have never given serious attention to this subject. It would be no small accomplishment to save some from the humiliation of the stammerer's condition, and, therefore, I will present some things to avoid and some to foster in the speech development of little children.

Referring to the process in the acquisition of speech, the meaning of a word is always the memory of a sensation or a group of sensations. The first utterances are imitations of words frequently heard by the child, without any sense of their meaning. This imitating process is an acquired reflex. Whatever the child hears, right or wrong, is silently making its impression upon the sensitive brain. If the impressions are those of speech, marred and jumbled by stammering or stuttering, the child's future, as far as speech is concerned, is in peril.

If the child hears either stammering or stuttering and comes to maturity with speech unaffected, it is what one might term *good luck*. The writer recalls a tiny girl whose parents employed about their place a man who stuttered. That little girl used to be heard, walking apart by herself, trying over the halting speeches to which she had listened. Had there been the least tendency to stammer or stutter, that child would have suffered severely from innocent mimicry. The fact that she said over to herself what she had heard, showed the deep impression made upon the child mind. She, however, escaped the affliction. This instance is named as an unusual exception.

It seems sometimes little short of phenomenal the way in which word impressions are stored away, both by children and adults. When least conscious of it, certain sounds, words or the manner of expression are impressed at the speech center of the brain to be brought forth in a way surprising at times. Very little children, to whom certain lines have been recited or sung, after a lapse of days or weeks, will suddenly utter with startling clearness what had been apparently forgotten. A further illustration of the unconscious impressions made on the speech centers of the brain, is the authenticated case of a young woman employed in the family of a scholarly man who often read aloud at home from books written in ancient languages. This young woman, long afterward, in the delirium of fever was heard to recite whole passages of these classical works. This actual occurrence shows in another way how susceptible is the brain, and is related to force home the matter in hand, that when least expected a certain dangerous foundation may be laid for defects of speech.

If speech itself is developed by imitation, it is clear that all such pronounced and glaring defects as stammering and stuttering would stand before the learner of speech in a way threatening to the welfare of the child. Persons of extreme sensitiveness, and with large imitative faculty find it difficult not to follow the contortions of

the severe stammerer when there is no thought of mimicry or mockery. Such sensitive persons find it necessary to center all their will-power in order to dispel the deep impression of the stammerer's struggles.

Though the great predisposing cause of stammering is heredity, there are, as said before, immediate causes which exert their influence during childhood, for most of the stammering or stuttering, afflicting adults, began to manifest between the ages of four and ten years.

#### HARSHNESS AGGRAVATES STAMMERING

Hectoring, teasing and making-believe, when they are to the annoyance of little ones, should be absolutely forbidden. So grave are the results of frightening children, that even after maturity and judgment have come to wield their influence in other directions, the objects of fear set up, still continue to assert their power. To allow anything to disturb the courage and confidence of a little child, is worse than I have words to characterize the offense. It is depriving him of what should be the possession of every one who expects a reasonable degree of success in this world.

Without seeming censorious, or condemning those having under their care little children, it is hard to discuss the relationship of stammering and the fright caused by harshness. It seems incredible, but it is nevertheless true, that many who probably might have escaped the affliction of stammering under gentler influences, have come to maturity handicapped because of the severity of the austere harshness exercised over them. Those who have never stammered do not understand the extreme and peculiar sensitiveness of those so predisposed. The erroneous idea that discipline requires that constant menacing fear be held over a child like a lash, is altogether a wrong—one almost irreparable as far as the welfare of the child is concerned. Punishment has never eradicated stammering and it never will. The more censure and



severe treatment visited upon the child, the more active are the very forces that impede his speech. The child who lives in constant fear of punishment, especially punishment *because* he stammers, is to be pitied. He is like a man walking beneath the low timbers of a garret. The constant stooping beneath the terrifying power of another's will, incapacitates his own assertive power along right lines. He cannot straighten up and express his own individuality because of the paralyzing fear that possesses him. And this fear shatters his fluency of speech.

#### EXERCISE SYMPATHY WITH JUDGMENT

In speaking against over-severity and harshness with children inclined to stammer, the writer would as earnestly urge the avoidance of the other extreme—entire neglect of discipline. Sometimes it is difficult to decide which is the greater wrong to the child. It is not, however, difficult to understand how it is that a child who stammers is humored and protected from hardships. To those who are sympathetic, nothing seems more natural than to humor a child who seems to have all he can bear struggling with his impediment. But sympathy must be exercised with judgment. Repeatedly, stammerers have told me that the training they eventually carried out was harder for them because they had never known much of self-discipline. Sorrowful over the repeated failures encountered because never disciplined at home, stammerers have related to me their bitter experiences.

#### STUDY THE CHILD'S NEEDS

What can be gained from considering these two extremes—over-discipline or the entire absence of it—in the case of stammering children? It should emphasize the importance of studying the child's needs, his temperament and the general trend of his mind. Wherein is he weak?

Firmness and decision without harshness should be exercised in his control if he is inclined to stammer. Daily set before him little tasks not too irksome, and see that they are properly attended to. This procedure helps to develop the will-power in the right way and leads to concentration in greater future undertakings.

It is my desire to make this special reference to children inclined to stammer, a help to those not realizing the manner in which speech is acquired and developed, for it is well known that to ward off trouble, is easier than to cope with it when it is present. There are times when comparatively little attention would save a child from years of misery, such as stammering and stuttering entail.

#### OVERTAXING OF CHILDREN

Another thing to be avoided is the overtaking of children during the "*cute*" age, when they are making their first attempts at speech. The coaching of baby speakers in long recitations that would tax the mature mind, is advised against. The child, eager and of unusual mental activity on the language side,—fairly *founded* on words—stumbles once in a while under the unusual strain and is unduly embarrassed by being shown off when least expected, starts on the stammerer's path. This is all done unwittingly, but the warning should stand that a child overly precocious should be kept from a practice dangerous to its powers of speech. Kindred to this mistake is the sending of little children too early into the graded schools. The very fact of their eager desire to learn, should be a warning to restrain them from overdoing, especially when the physical growth is not keeping pace with the mental development. The need of unusual care, when children are just recovering from illness, should be emphasized here. Many a stammerer is what he is because of the strain brought upon him while the body was frail and the nerves unbalanced from illness.

Whether at home or at school, a child just recovering from an illness, should have careful guidance as to speech.

#### VIGILANT CARE NECESSARY

To say just where the trouble lies, how it is that nervously organized children develop into stammerers, why more have not been checked before the age of self-consciousness arrives, is difficult. One with a wide experience in treating the speech defects of stammerers, is liable to appear harshly critical in reaching conclusions. But could the public know what the instructor often deduces from the experiences related to him by those who have struggled up from childhood, stammering, there would be not a few instances where vigilant care would put an end to speech difficulty before maturity. For one who has been over the road and who knows the pitfalls where dangers lurk and where the descent into the woes of inveterate stammering is so rapid—for such a one not to speak by way of warning and advice would be short of duty.

An important factor in the stammerer's cure is the fullest and highest cultivation of the powers of his mind upon the side of will. He has, as a rule, just as perfect organs of articulation, as persons not thus addicted. Moreover, he is to keep this in mind to encourage him to give serious thought to the mind side of his cure. Frequent reference has been made to the necessity of everyone who has ever stammered, guarding his health, keeping at the highest point of being—health of mind and body. Thought upon all things that will tend to make the physical being normal and healthy, should engage the mind of the stammerer. Everything that touches upon his daily life and habits at any point, should be weighed, considered, pronounced good and acceptable, or rejected as harmful or worthless according to its influence upon his precious possession, health. If in any way the thing under consideration wars against his highest con-

dition of health, let him reject it as an enemy to his speech.

This manner of weighing cause and effect, deciding relative values, has helped more than one person in foregoing something detrimental to their welfare. He must in all things seek the golden medium ground of temperance. An uncontrolled appetite, a temper that has no governor, a disposition that rises to heights of ecstatic joy, only to drop to the valley of despondency, all points to weakness of the will and a lack of balance. If the stammerer finds that in any of these directions lies his weakness, he will be vastly benefitted by thinking out of these ways into habits of mind more normal and more evenly balanced. The man of rightly directed will is he who is able to avoid extremes and the same control manifested in these matters of disposition and appetite will help the stammerer in his contest for free and untrammelled speech. One has but to experiment to find this is true.

#### AVOID WORRY

An enemy to the acquisition of free and tranquil speech is worry. Worry is a canker that eats the heart out of much of the willing and energetic world. Worry is the germ that grows and grows, eating from the heart outward and verily destroying the fruit of life. To change the figure in relationship to the case of the stammerer, it is the grim black course down which he often walks, his speech the prey of a hundred lurking evils that infest the black and narrow uncertain road of worry. As soon as the stammerer is well on the road of worry, before and behind, in every direction, rise up the very imps that throttle his will-power and leave him helpless and useless as far as the positive, achieving man is concerned. Worry is a dark distracting road, and that power of the road known as will is not in the ascendancy when anyone worries. Men of strong wills have not been men easily overcome by worry. In the face of great odds they have



been able to lie down and sleep. Why? Because unappreciative of the possible impending struggles through which they must pass on the morrow? No, rather because they knew that rest was the first perquisite for the unusual trials and that their first equipment must be quiet nerves and a clear head in order to clearly cope with the crisis at hand. Therefore, the will was brought to bear upon the situation, and worry fled. Worry, like all other negative states of mind, must retreat when the will is centered on some good and positive accomplishment. So important do I consider this matter of the stammerer's banishing worry, that I quote what Silas Wright Geis, B. S., Ph. D., writes on "Conquering and dispelling health's greatest and commonest enemy, the habit of worrying":

"Worry is a great destroyer of happiness. No other mental process consumes brain substance with such rapidity. Modern research has proven that mental states have a direct effect on the stomach and intestines, the connecting link being the pneumogastric nerve. A pleasant condition of mind promotes healthy action on the part of the digestive and assimilative organs. It is with good reason, therefore, that the family physician so often says in part, and above all, don't worry." \* \* \* \* Dr. Geis goes on to state the following remedy for overcoming worry: "How can you get the harassing thought off your mind? By reasoning with yourself thus: Either this thing is past remedy or else it isn't. If it is, I had better not waste time thinking about it, and subject myself to no more nervous strain over it. If it isn't, what I want to do is to find the easiest and most expedient way out of my difficulty. Having devoted my entire and continuous attention to the matter of my worry for some time, and having lost considerable sleep and appetite over it, my brain is not in a condition to think and to reason to the best advantage just now. So I'll take a short mental vacation and then return to this thing; prepared and resolved to think a way out of it. \* \* \*

A good way to allure yourself away from the object of your anxiety is to select some incident, situation or period of your life that is marked, in an unusual degree, by happiness.

"Two mental objects cannot occupy your whole attention at one time, any more than two physical objects can occupy the same space. Your salvation, therefore, lies in making the joyful picture the sole occupant and possessor of your brain. You can, if you really want to use your will power. \* \* \* \* \*

"And now, for your reward. Your worry obtrudes itself less often, and each successive time it is easier to dispel. And finally comes that splendid exaltation, born of the consciousness that you, by your own exertions, are not only conquering more and more each day, each hour, this particular worry, this anxiety, but are storing up within your being all future instigators of unrest. Without being conscious of it, at first, you gradually become, in an ever augmented degree, that supremest of beings—master of yourself."

Had Geis been writing for stammerers particularly, he could not have expressed his ideas more in harmony with those which every successful teacher of this afflicted class must hold. He so emphasizes this matter of banishing worry and its consequent effect upon mastery of self, that I wish to bring his very manner of expression to the notice of every stammerer who is on the golden quest of perfect speech. In different parts of our country to-day clubs are forming to combat worry. "*Don't Worry*" is their watchword, and the instigator of the movement has written forcefully of the cogent need of banishing this enemy to human progress. And every stammerer will find in his own life a verification of this truth—if he banishes worry—that he will become in increasing degree, master of himself.

Worry kills. Worry tears down and weakens, depletes energy, increases nervousness, destroys the mind, interferes with digestion, creates stammering and plays havoc

generally. Why worry? Does it make matters any better? Doesn't it make stammering worse? Is not stammering in severe cases largely the result of worry and fear? How, then, can the man or woman that stammers mend matters by worrying? The hardest types become "*hardest*" because of worry. I know it is difficult to keep cheerful when sorrows confront you, when you realize that many of the pleasures of the world are denied you, when you are held up to mockery and laughed at because of an infirmity. But why worry? If the worry in itself makes your condition of stammering worse and embitters your cup of sadness, is it not better to cast it aside? After all, when we consider the pitiable condition of others who are more sadly afflicted than those addicted to stammering, when we consider their condition of hopelessness, we sincerely believe, after all, that stammerers and stutterers have much, and very much indeed, to be thankful for.

At the World's Fair (Louisiana Purchase Exposition), in the Educational building, where thousands of educators and others interested in my work saw demonstrations of the methods which I employ to effect the cure in cases of stammering and stuttering, I was positioned with my classes directly opposite and within twenty feet of the schools for the deaf and blind. Here I became acquainted with a number of blind and deaf pupils under instruction, giving practical demonstrations of the methods pursued. What impressed me more than anything else in connection with their advancement, was their apparent satisfied and contented manner, their cheerfulness at all times; yet they suffered greater misery and were a thousand times worse off than my pupils who stammered. Their condition was, indeed, a pitiable one compared with even the worst case of stammering under my instruction. Comparing their lot with stammering, they regarded their affliction as being the more serious, still they were cheerful and even joked and laughed with me and with one another in making the comparison.

After all, when we look around on all sides it seems that stammerers have much to be thankful for, because they surely can be cured of their infirmity, while there are many afflictions as severe and even worse and from which any who suffer may never hope for relief.

The cheerful view of conditions as we find them is the view for the stammerer and one that will in the majority of cases require cultivation to a degree. The stammerer usually is not inclined to look upon his condition with cheerfulness of spirit, but he who does will surely win. Positiveness and determination, coupled with cheerfulness, will work wonders in the treatment and cure of stammering and stuttering. It sometimes happens that the stammerer becomes impatient waiting for results. The idea has probably been held out to him that he can be cured in a few days, or he may have imagined that his case is less severe than is really true. He may compare his condition of stammering with the condition of another who has been cured and imagine because his difficulty is less aggravated in manifestation that it will be easily removed. When it comes to the actual getting down to business in the matter of overcoming his stammering, he may find that his case is more difficult than he had anticipated, and this may discourage him.

It is a sad mistake for any under treatment to allow themselves to become discouraged simply because they find that their speech trouble is more aggravated and deeper seated than they had anticipated. Of course, this rarely occurs; the reverse condition of affairs being the case generally. The stammerer usually imagines that his case will be much more difficult to cure than is really true, but occasionally there is one who finds that his stammering was more deeply seated and more chronic than he had supposed. Patience in any case is necessary and perseverance always. I may well and very appropriately quote here the old proverb, "Time does not preserve that which it costs no time to create." This is particularly true in the treatment and cure of stammering. The



permanency of the cure, it seems to me, is the object of the treatment and without that permanency all effort is in vain. Who that stammers wants to be cured for a week or a month, or even for a year, to find that the demon has returned with all of the former horrors and conditions present? Better never hope for relief than to be cured (apparently) and stammer again.

It is largely to avoid the recurrence of stammering or the possibility of it that the treatment is prolonged for a time, as the more thoroughly eradicated it is at the time of treatment the more likely the permanency of the cure to follow. There was a time, and only a few years ago, when those engaged in the treatment and cure of stammering and stuttering aimed largely to cure their pupils, little thinking of the possibility of after occurrence and in the majority of cases as little caring whether or not the cure effected was lasting. Apparently, there are still some of these unscrupulous pretenders engaged in the work. They appear to regard more particularly their own interests, so far as the money to be made is concerned, than they do the interests and welfare of those who unknowingly submit themselves to this kind of treatment and business methods. Permanency of results is the object sought in the cure of stammering, under any properly managed treatment, and it is to be hoped that those who are seriously contemplating treatment, will study carefully this phase of the problem before entering upon any course of instruction. The lasting cure is the cure that is ideal—and a cure to be lasting and permanent necessarily requires to have had ample time in which to establish conditions such as will stand under the most trying circumstances.

You ask me, "What is the ideal cure?" My answer is, An ideal cure is one that is permanent; a cure that makes your talking equal to any occasion; that enables you to accost a man on the street and submit a business proposition to him, to ask him questions or to answer any questions which he may ask you; to approach him in

his office, if needs be, and speak to him there without the slightest fear or hesitancy. That enables you, under these circumstances and conditions, to answer any question that he may choose to ask you; to speak from a platform at a public gathering, to buy or to sell goods, to engage in parlor conversation, either in your own home or elsewhere, without fear or embarrassment; in fact, the ideal cure is the cure that is absolutely perfect in every respect, and nothing short of this should satisfy any one who stammers. It is, usually, because ideals are not high that we find in some cases a carelessness and indifference with reference to the outcome of treatment. This attitude, however, is rare, as the majority of those who have come to me for instruction have manifested a strong desire to overcome their stammering and have worked persistently to conquer the difficulty. It cannot be said of those who stammer that they are indifferent, as among the thousands with whom I have personally come in contact very few have shown this disposition in their attitude towards the work. The average man or woman who stammers is anxious to be cured and generally, shown the way to succeed, will work with a vim and determination which in some cases they had never before shown in any undertaking.

Stammerers and stutterers keenly feel the humiliation that grows upon them because of their infirmity; they are tossed aside in the struggle for success, ridiculed and taunted; thus are more than anxious for escape from the enemy, or shall I say, more than anxious to crush the enemy before them. Reader, are you a stammerer? Granted, that you are, let me urge you to take up the weapons of warfare against this monster that for years has been and even now is crushing you to the earth; that would burden your life with sorrow, that would close to you all avenues to success, that would shut off from you the pleasures of social contact and enjoyment with your fellows, that would eventually rejoice in your defeat and defiantly boast of having conquered you. A monster

no less than a coward, this stammering demon stays in hiding, awaiting a time when he is especially unwelcomed to pounce forth in defiance of your greatest efforts to ward him off.

#### STAMMERING PECULIAR

Stammering, in some respects, is very peculiar. When you want to talk well, you can't without stammering. When you don't care whether you stammer or not, you can speak perfectly. Of course there are exceptions to this, but nevertheless, the rule seems to obtain in a good many cases. Conditions seems to have much to do with perfection in talking, for those who stammer. When you go to a store to purchase you find there are certain clerks with whom you can talk without hesitancy; while if you were expected to converse with others, you would be wholly unable to say a word. You can talk perfectly to those who have never heard you stammer, and who, you know, understand nothing regarding your affliction; while to your own friends, parents or relatives you can scarcely speak in a connected manner. Sometimes in other cases the reverse condition of affairs is manifested. There are so many different conditions in stammering that it would require many pages to cover them. No two persons stammer in the same manner. Even habits of contortion are different. Sometimes, I think, I have witnessed every conceivable kind of contortion in connection with stammering, only to find a case such as I have never seen before. I have never known two persons who stammered exactly in the same manner or alike. In some instances I have found cases that bore much of a resemblance; yet upon examination there has always been some difference manifested. People look alike, yet there is a difference, and even those who bear a marked resemblance toward one another, usually show a wide difference in disposition.

There are no two leaves in the forest exactly alike, and even though there are countless grains of sand on

the seashore, it is claimed that no two are exactly alike in minute particular. Where a number in the same family stammer, (all due to a parent cause,) it will be found sometimes, and is usually the case, that there is no similarity whatever between such cases, so far as the manifestation of the stammering is concerned. One member stammers in a peculiar manner by twisting his lower jaw sidewise, another stammers by slapping himself violently, while a third manifests his difficulty by remaining silent, unable to utter a word, the only evidence of his stammering amounting to one or more of the many symptoms which usually accompany such conditions. Just why those who stammer contort their features, twist their limbs and otherwise make themselves appear ridiculous, is hard to tell. The condition grows upon them gradually until finally it becomes fixed. Usually in the beginning it is not marked. It may consist of some simple movement of the body, such as the movement of the arm, the throwing of the head forward or backward, twisting the tongue in the mouth, protruding the tongue, allowing saliva to run from the mouth, stamping the foot or feet, kicking the leg, catching hold of a chair, or grasping anything firm, raising the body on the toes, turning the body or walking up and down. All of these peculiar antics and a thousand others are practiced by stammerers and stutterers in their usually ineffectual efforts to speak. This constant nervous strain, the result of many failures, gradually weakens the constitution, saps the vitality of the sufferer and makes his condition more and more pitiable.

It will be noticed that stammerers who have suffered long years from their affliction, grow more and more nervous, finally becoming erratic and whimsical. The former poise and equilibrium of control which, in their younger days, they were able to exercise to a degree, is lost, their speech difficulty becomes more and more chronic, they lose confidence, they doubt their ability to succeed. Ostracising themselves from social intercourse



with their fellows, they finally fall into a simple manner of living, satisfied in a degree because their circumstances compel them to be satisfied, yet realizing how much of the enjoyments of the world they have been deprived of because of their affliction. Some such souls have fought a hard battle in their efforts to succeed; others are still fighting, but against odds. These must realize, sooner or later, the great disadvantage they are suffering in a world of competition that is growing more fierce each year. Stammerers are rapidly awakening to a realization of the fact that one's ability to speak has much to do with success in any avenue of business or social life into which he enters.

#### COÖPERATION NECESSARY

"Indifference never wrote great works, nor thought out striking inventions, nor reared the solemn architecture that awes the soul, nor breathed sublime music, nor painted glorious pictures, nor undertook heroic philanthropies. All these grandeurs are born of enthusiasm and are done heartily."

I have quoted this ringing passage that the mind of every reader may be centered on the thought, that coöperation, coupled with determination, is necessary for the success of any project. The cure of stammering is no exception to this rule.

Sometimes I am asked whether I meet any hopeless cases of stammering. I am compelled to say truly that I do come across cases that are apparently hopeless. This may startle some earnest, aspiring readers in view of all I have written upon other occasions. But I would call their attention to the phrase, "*apparently hopeless*." I do not write these words for the discouragement of the earnest and purposeful who look forward and are *working* for a cure for stammering. Strange to say, it does not touch them, though it does concern them. It should inspire them to unremitting effort. For determination *to be*

*cured* must and will so permeate the being of him whose purpose is fixed, that he will brook no defeat. Such as he does not dread to know that the cure for stammering involves self-denial—a ruling out of everything that injures body, mind or soul. The stammerer whose mind is fixed upon being freed from his wretched defeat, looks as cheerfully upon the instructions he is to follow as the very sick man, who is very conscious of his precarious condition, looks upon directions given by his physician. Both are willing to follow the advice of those who know the road back to health, whether it be of body or mind—as the latter is very important to the stammerer. His disease is not visible physically, that is, the ailment itself lies far hidden in the character of certain brain nerve fibres—but the manifestation of his trouble is before the world in most cases.

I do not shrink from telling the determined person who stammers what he must do to free himself of his serious burden. Unremitting application of the principles imparted to him for the needs of his speech, is the price he must pay for a cure for his stammering. The will of the stammerer, shining and bright and strong, single-hearted and with a clear purpose, is guided for the contest to rout and sweep away every vestige of difficulty. The stammerer must summon his will to help him just as a ruler calls upon his strongest man in times of trouble. That strong man, we infer, is steady of nerve and clear in brain. He has had previous preparation for the trials of the present hour. He does not spring up full-fledged as did the soldiers of that mythical Greek hero. Inadequate preparation shatters more than one career. The one-time stammerer, who would find his will bearing out the command of his mind, is the one who has prepared for the exigencies of speech by careful training of his will. This one-time stammerer will tell you that day after day he set himself tasks to be performed and did them at the time allotted and set apart for them. His reason for so doing was two-fold; the fulfillment of duty and the education and discipline of his own will.

If the stammerer will only enter into the work of being cured of stammering, with one-half as much energy and spirit as the average business man who succeeds in these days of close competition, the number of stammerers would soon perceptibly grow less. Indeed, there have been large numbers who have done so, and like strong rays of light to cheer and encourage others who look forward to new life of free speech, right here I shall quote some of their sentences.

One who is full of enthusiasm and renewed purpose because his free speech seems to have given him a new lease of life, says: "No other (than success) can be the result, if faithful practice and persistence are put to the test."

Another severe stammerer, who had reached middle life before realizing there was a change for him to rehabilitate his speech, says: "The word failure should be obliterated from the dictionary (as far as a cure for stammering is concerned)."

That stammering cannot only be cured, but the speech can be greatly improved thereafter, is evidenced by these words from another: "I can talk better than when I completed my course."

Another who has gained a new outlook on life because now unhampered by his speech, has written of the satisfaction he experiences because he can talk, and considers the time and energy he put into his work one of his most valuable investments which he will never regret.

Confirming what I have said repeatedly as to the necessity of application, a former stammerer writes: "The result of my observations is that 'for those who are unwilling to work or follow instructions, it is the same as anywhere in the world, they will fail miserably'."

One former stammerer writes of the necessity for those afflicted as he was, to cast aside pessimism and all its kindred, for, says he, "Stammerers are from their very nature doubters." Some who stammer or have stammered may resent this, but it is, nevertheless, true. The fruitless

struggles of the stammerer who has had no light on his difficulty, nor positive help for all he suffers, is oftentimes one of the most miserable mortals. He will tell you he *has* frequently taken new heart and started over and tried again, only to be pitched steep down over the jagged rocks of humiliation and failure. His sensitive nature has writhed under the jeers of the shallow and thoughtless each time he has failed in his speech—this failure possibly often ludicrous because of his contortions. Then he may confess how less and less he has frequented the society of others, hoping thus to be free from all that glaring light of criticism. Thus has he grown more morbid.

If a man fails in his attempt to be cured of stammering, we usually find that his failure is due to the lack of application and persistence. The man who fails in business, fails because he has not been obedient to the laws governing business. A close scrutiny into almost any failure, reveals a lack of energy centered on the particular work in question.

In the early days of our country, before the general use of matches, persons in remote places kindled their fires with a "burning glass," which resembled a reading glass of modern times, only its two surfaces were more convex. By converging the sun's rays to a focus, an intense heat was generated—even to the point of ignition. What produced the fire? *Concentration* of sun's rays. And so it is in any undertaking—the desired result can only be obtained by concentration. If it is the cure of stammering, every energy of the stammerer must be centered on his cure, for the time being.

One of the best cures that ever went out from my institute, was a young man who stands out in my memory as one coming into the work as though ready for a race. He looked—so determined was the very poise of his eye—as if he really *saw* the goal toward which he was headed. It is needless to say his goal was perfect fluency of speech. His preparation was the complete throwing



off of everything that would hinder his progress. He had been addicted to smoking, but realizing that smoking was contrary to the rules for his improvement, he gave up the habit. He saw that this "put vigor in the body, intelligence in the brain, and spirit in the whole constitution," therefore he went cheerfully about it. He illustrated (this pupil of determination and energy) that "the secret of success is constancy to purpose."

Carlyle says, "A man with a half-volition goes backwards and forwards, and makes no way on the smoothed road; a man with a whole volition (will) advances on the roughest, and will reach his purpose, if there be even a little wisdom in it."

The man who stammers though he may not be of brilliant intellect, will also advance if he but educates his will and avails himself of the opportunities now afforded for the cure of stammering.

It was just the other day that a very earnest man, who is bound to be cured of stammering, asked a friend, who is a decided optimist: "Have you read the *Rubaiyat of Omar Khayyam*?" The other replied, "Yes, but not often—among other things it is so full of fatalism." "Well," replied the other, the convalescing stammerer, "you know we stammerers are, many of us, inclined toward fatalism; that is, through our suffering, we have come to believe that all is as it is, 'through inevitable necessity.'"

Now, there may be those who differ from me—but my experience has revealed to me that fatalism and pessimism go hand in hand just as certain creatures infest miasmatic places. The air of the swamp is made noxious, and even dangerous, by the presence of malaria infesting it. The spirit atmosphere of the fatalist is full of pessimism. If not the worst form of pessimism, at least "a disposition to take the least hopeful view of things"—looking not into the light, but upon the dark side of things. It is concerning this habit of mind that I wish to speak emphatically to stammerers. It is by no means a new subject

to be discussed, but is of relative importance to the welfare of him who would be cured of stammering.

For a long time it has been known that certain states of mind affect the chemical changes in the body. That is, physicians have known it, and well-informed individuals who have made a study of physiology, have known it, but a general knowledge of this has only in recent years begun to take hold of the popular mind. To diverge from the subject with which we started, it would be a profitable study of influences to notice how emphatically the emotions influence the physical life of people. When one speaks of emotions the superficial think, usually, of love or hate. In this discussion you are to think of the feelings or emotions as either gentle or painful. Physicians tell us that hatred, jealousy . . . . . and kindred emotions work havoc with the fluids of the body. Violent illness and even death follows high tides of these emotions. On the other hand, joy and an exercise of the pleasurable emotions have brought people up and out of the shadows and weakness of sickness, and even death itself. New hope, gladness, joy, stimulate anew the circulation. As the warm sun of the new spring days wakens the sap, calling it through trunk and limb and branch, so the pleasurable emotions change the currents of the body, causing the blood corpuscles to move with a certain healthful motion. No stammerer can afford to lose sight of the stimulating effect of good, wholesome, cheerful thoughts as constant companions. The influence of the pessimist is one that the stammerer should shun as a poison. For whatever lessens his own power, is detrimental to the stammerer's progress in the cure of his defect. A pessimist emits an atmosphere like a fog, as far as the spirit health of those around him is concerned. He dampens the ardor of the individual, and the best that is within us dwarfs under his cynical gaze, unless we have the ability to assert our individuality in a marked degree.

This brings us to another matter well worth the stam-

merer's consideration. If you have ever stammered, avoid as far as possible, association with those who stammer. You cannot afford to keep fresh in mind the impression of your own early struggle. It behooves every stammerer to leave behind, as rapidly as possible, every remembrance of the sensations he experienced when a stammerer. It can readily be seen that constant or even frequent association with those who struggle and suffer visibly from the throes of stammering, causes the average stammerer to live over again what he has endured. There are some nervous, sensitive people of normal speech who declare they could not come constantly in contact with stammerers without it affecting them disastrously.

Then for him who ever hopes to be cured of stammering, there is necessity for careful talking. Rapidity of speech in itself is an index of overstrung nerves and there are many who, having studied their own needs, have come to acknowledge this. Then some have learned that to slacken up and speak slowly, rests the nerves immeasurably. I am speaking now, not particularly of stammerers, but of nervous persons in general.

Stammerers, many of them, suffer from the rapidity with which their thoughts spring up and crowd upon each other for utterance. A calmer, more deliberate mode of utterance seems to put a check on the rapidity with which the thoughts spring up. The mental confusion from the "mob" of struggling ideas is, therefore, calmed by the assertion of the will.

Now, what is a stammerer to do whose whole life effort at speech has been to speak rapidly all that he could speak? There is but one answer—Go slowly. But how? First of all there must be an abundance of reading aloud, applying what has been learned concerning the manner of approaching and uttering sounds that have been difficult. In the beginning, choose such selections as are very quiet, but rhythmical that the thought itself may have a tranquilizing influence over the mind. Place in contrast the two following quotations, the first from Scott

and the second from Burns, well known poems:—

“Waken lords and ladies gay;  
O’er the mountains dawns the day!”

Notice the short, quick syllables when it is read naturally, and contrast the same with the quiet musical lines of “Afton Water”—

“Flow gently, sweet Afton, among thy green braes  
Flow gently, I’ll sing thee a song in thy praise!”

In selecting prose for reading in the days when the objective point is slackening speech-speed, choose that which is rhythmical, tranquil and even sonorous. Prolong each syllable successively until the next is ready to come in. The next is ready for utterance in this kind of practice when you will it is to come.

All of the work should be done in a voice pitched low. There is far less nervous strain when one speaks in a lower pitch. The very nervous, habitually key the voice high—at least until training has taught the relief coming from the lowered speaking voice.

One more suggestion for those who stammer. Cultivate a spirit of doing all things resolutely and definitely. Resolution to do is in itself a source of strength. “Resolution,” says John Foster, “is omnipotent,”—he that resolves upon any great and good end, has, by that very resolution, scaled the chief barrier to it. He will find such resolution removing difficulties, searching out or making means, giving courage for despondency and strength for weakness, and like the star to the wise men of old, ever guiding him nearer to perfection.”

Ralph Waldo Emerson says, “A good intention clothes itself with power.”

If the stammerer has resolved he will not be a stammerer any longer, he has done one thing essential to a cure of his infirmity. The resolution paves the way for ways and means which he must then seek out to fulfill his purpose. Of course, the way will not open all paved before him—but his newly awakened resolve will quicken his spirit along other lines, and he will feel firm and strong to



undertake what, in his previous hopeless condition, seemed futile.

Let the stammerer avoid association with the apprehensive. Remember, that there is a world of truth in the saying that, "The fearful are the failing." If he wishes to be rid of his affliction, he must abjure every influence that may conjure up his old weakness—lack of confidence that he can ever speak normally, freely and fluently. It does not follow that he who has stammeered need to affiliate with any cult or sect whose chief proclamation is concerning mind or spirit over matter—but it does behoove him to study carefully the laws that govern his own being.

Tranquility, repose, serenity, come not from without but from within.

## THE VALUE AND RELATION OF PHYSICAL BREATHING AND VOCAL EXERCISES TO METHODS FOR THE CURE OF STAM- MERING AND STUTTERING\*

The value of physical exercise to methods for the cure of stammering, is of recent recognition. For a quarter of a century only, have reliable authors on this subject advocated physical culture as an important factor in treatment. There is an extensive history of stammering previous to this period which shows that early investigators and teachers were quite at sea as regards the origin of the difficulty and the necessary means to correct speech. A recital of their theories, interesting as they may prove as curiosities, would be worthless for practical purposes. Their theories were poorly founded and the application of them visited disastrous results upon many who were in far worse condition after than before treatment.

Very ancient are the first observations made concerning stammering. Hippocrates, Aristotle and Galen wrote of speech defects, while to Satyrus, the Grecian actor, is attributed the cure of Demosthenes, who stammered. However, the generally accepted assertion that Demosthenes' cure was effected by speaking with pebbles in his mouth, has no historical basis. But to that old Grecian actor, Satyrus, is due the honor of combating stuttering and stammering by lessons in diction. Chervin, the modern French specialist, gives to Satyrus this credit. More-

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\*A paper by George Andrew Lewis read by invitation, April 19th, 1903, before the American Association for the Advancement of Physical Education.

over, Chervin says that modern science in the treatment of speech defects has found success in proportion to the nearness of its approach to the simple and natural methods transmitted to us by the ancients. Chervin says he has tried all systems of treatment with success, but that he relies mainly upon the education of the will. In 1879, Coën, the celebrated specialist of Vienna, reported forty cures by elocutionary and physical exercises. Gunther, the principal of a deaf mute school in Germany, advocated both vocal and physical exercises. It is only fitting at this point to give special mention of Andrew Comstock—who, as early as 1837, had done pioneer work in the teaching of stammerers. In 1827 this venerable and earnest instructor in elocution began work upon a method for the cure of stammering, being the first in this country to assert its possibility. He was philanthropic in disposition and eager to advance every cause that made for the betterment of mankind.

Later authorities, namely Klencke, Werner, Howard, Butterfield, Bristowe, Shuldham, Kussmaul, Hammond, Zug, Potter, Bryant, Johnston and Makuen have all recognized the value of breathing, vocal and physical exercises, as well as elocutionary drill for the purpose of eradicating the difficulty.

One writer has said that the entire treatment for a complete and permanent cure of stammering may be summed up in the following words:

First. The regulation of breathing in general and in the acquirement of deep breathing in particular.

Second. Exercises for the training, strengthening, and proper control of the vocal organs.

Third. The maintaining of mind and body in the best possible condition.

Fourth. The greatest possible development of the faculty of concentration and attention.

Fifth. The strengthening of the will-power.

To a certain extent the methods and theories of these authorities are similar as to their acknowledgment that

physical exercises are essentially valuable in the treatment of stammering. The principal difference in the results accomplished, was due to the thoroughness with which such methods were systematized and employed. The importance of method must not be overlooked. One might be ever so well versed in the theory of treatment, and yet, without a clear and definite plan of procedure, be unable to discipline and control those whom he aims to benefit.

At times, discipline which exacts much of the pupil, is necessary for his future good. When a pupil enters a school, entirely at sea as to correct speech, discouraged, nervous—even to illness, he must find chart and compass in the strong, rightly-directed will of his instructor. Only by doing implicitly what he is directed to do, will he have taken the first step in the right direction. At all times, in the treatment of stammering and stuttering, the teacher has very much to contend with. To his work there are obstacles not met with in any other line of teaching. In order to attain the best results, it is essential that the student have an unswerving faith in his method of treatment. Without implicit faith in the efficacy of the means brought to his aid, there is an unsurmountable barrier in the mind. Stammering comes from lack of confidence, and, therefore, a firmly established confidence in the efficacy of the instruction places the victory over speech defects so much nearer.

Scepticism and unbelief in the discipline to which pupils are necessarily subjected, militates seriously against correct speech. That wavering uncertainty, which is bred of incredulity, is one of the greatest enemies of the stammerer.

Stammering has been defined in many different ways. Time and again has it been shown in cases of stammering that there is no organic defect whatever. It has been variously defined. Some say it is inability, under certain conditions, to control the muscular action of the organs of articulation. Others define it as an affection of the



vocal organs, causing a hesitation. The following shows the different ways of describing the trouble; a difficulty of utterance; a choking sensation and an impeded action of the vocal apparatus; the inability to form sound; a lockjaw kind of gasping; a chronic spasm of the articulatory organs; the frequent repetition of sounds and syllables; a temporary inability to vocalize; a halting, defective utterance. In this manner I could go on giving many different recorded definitions of stammering. But, after all are considered, one conclusion is deducted, stammering results from lack of confidence.

Whatever the cause, whether it be the result of deficient mental energy, or whether there is inability to co-ordinate thought and physical utterance, or whether the difficulty is manifested in facial contortions—these points are not in the question. One thing we do know—persons who stammer lack confidence in their ability to speak. They are beset by constant rebuffs. At times, they think they cannot speak—but try and find it possible. Again, they start with assurance, only to be thwarted by lack of proper response from the organs of speech. In fact, they know not what the outcome of their attempt to speak will be. It is this uncertainty, this lack of surety that keeps them constantly in apprehension. This apprehension produces extreme nervousness, in the wake of which follow multitudes of speech difficulties. Therefore, as far as speech is concerned, the stammerer becomes a skeptic. He doubts his own ability, and quite naturally, because of repeated previous failures, discredits the ability of others to free him from his burden. His incredulity and skepticism have grown up naturally. He is depressed ineffably by his stammering. The more severe his case, the less probable does it seem that he can be made speech-free. He has always agonized under this humiliation. To be free—is too good to be true. He looks upon restored speech as does a man who has come into an inheritance—until he is thoroughly convinced of its tangibility, he is inclined to doubt his riches as real.

Within recent years, however, the feeling of doubt and skepticism among stammerers is disappearing, as a knowledge of the remarkable results accomplished by modern institutions for the treatment and cure of the malady have disseminated confidence. Three points of belief must be established in the mind of the pupil: First, that the instructions will lead to ultimate cure, that his instructor's chief aim is toward his (the pupil's) highest good, and last, but of paramount importance, that he recognize in himself the ability to succeed.

He is now ready to face his work—to take the initiative step in his cure, submitting himself to discipline.

#### DISCIPLINE NECESSARY TO THE TREATMENT OF STAMMERING

Stammerers, as a class, are willing to submit to reasonable discipline. However, there are occasionally found persons who seem reluctant to observe the necessary instructions. This is occasioned oftentimes by the fact that they have been more or less humored because of their infirmity.

Klencke, who is recognized as the greatest European authority on stammering and stuttering, referring to the matter of inattention on the part of some stammerers, says:

"I have never neglected to impress upon stammerers and their relatives *with far more emphasis than their cases really demanded*, the necessity of their own co-öperation; and, although they would enthusiastically promise it, all stutterers begin treatment with the secret belief that they need only to follow the instructions in a passive and mechanical manner, that *they can take things easy*, and that they are not required to trouble themselves with mental activity and attention."

However, Klencke's methods were severe, and, consequently, his standard of criticism was very high.

The conditions were then as now. The stammerer lacks ability to control himself. His malady makes him nervous. He loses self-control, and thus the power to dis-

cipline is sacrificed. Frequently we find a stammerer who lacks in strength of personality, that persistency and purpose characteristic of those who achieve something in the world. His infirmity may be responsible for this, the impaired confidence manifesting itself in business and social relations. There are, however, exceptions to this general rule, but in the majority of cases, the lack of ability to control and to govern is a striking characteristic among stammerers.

Self-control in such cases is of more importance than the ability to control others.

Upon entering an institution, the stammerer finds everything in connection with the treatment entirely new to him. Formerly he enjoyed things pretty much his own way (except in his talking.) Now he must submit to the will of another. If he is prepared and willing to do this, an *absolute and permanent cure for his affliction* can be safely promised.

#### THE SILENCE PERIOD

An essential factor now recognized in treatment by modern institutions, is the *silence period*, the ordinary length of which is one week. The first thought concerning this phase of the work would be, "Is it not so irksome and tedious as to become distasteful, disheartening the pupil even to homesickness and despondency?" No, not as a rule. The intelligent and thoroughly conscientious stammerer, when presented with such a means to an end, is glad to do what will help to free him from his trouble. The nervous system, in severe cases, is well-nigh wrecked by years of struggle. Through no other means can so complete relaxation be brought to the nervous system as through silence. During this period, the patient, relieved of every responsibility, his mind at rest, settles down to complete composure. Silence, however, does not debar him from the regular work of the institution. He is expected to conform to the requirement, continuing his work regularly. The vocal work, breathing

and physical exercises of the school, engage his mind daily. Only from conversation is he restricted. When the object of the silence period is not understood by the patient, he is inclined to look askance at it. Those who do not believe in its efficiency, also regard it curiously. But he whose mind is receptive to the greatest good for himself, finds therein a period of rest and recuperation for the nervous system as well as a disciplining agent which promotes self-control.

The stammerer is not only enjoined not to speak conversationally during the silence period, but he gives his word to that effect, promising that he will keep it absolutely and to the best of his ability.

Deprived of the privilege of speech, there is an increasing desire for expression. This desire must be curbed. The natural thing is to respond when spoken to. Remembering his promise, the student refrains from speech. A thousand times he meets the temptation to break his bond—and a thousand times he stands firm and silent. He is keeping his promise by the exercise of his will-power, which, in turn, is thereby being strengthened. Each victory is a link of strength in the chain of self-control, advancing him farther and farther toward mastery in the situation. This is absolute control in that the speaking organs are under complete subjection.

Few of us, unless we have disciplined ourselves by a period of silence, realize how great is the desire to speak. To the stammerer, this discipline is entirely new. The beneficial result of silence is shown by the fact that many subjected to the ordeal forget, when released from silence, that the term of their obligation is over. During silence, the patient is allowed to write upon paper what he wishes to say. Upon release from silence, the observable control which he has established is oftentimes remarkable. I have even known of a number of stammerers to be cured during the period of silence, no further difficulty having been experienced. Silence is indeed a remarkable factor in the cure of stammering, and in



every recognized method of treatment the *silence period* should be incorporated.

#### THE VALUE OF BREATHING AND VOCAL EXERCISES

The value of breathing exercises in the treatment and cure of stammering and stuttering, cannot be overestimated. However, persons who stammer, were not caused to thus suffer because of abnormal respiration. The abnormal conditions are the result of stammering rather than a cause. Few stammerers in the beginning suffer from faulty respiration. In the beginning the breathing is natural, exactly as in normally speaking persons. Stammering, it is noteworthy, seldom manifests itself until after the child has acquired articulate speech. In some cases, gradually, and in others, with marked suddenness, the condition of stammering appears. The child, filled with fear, gasps for breath, strains every power to make its words intelligible, but without avail. Thus, from continual struggle, the normal habits of breathing become permanently deranged. The more violent the stammering, the more seriously is respiration impaired. This radical derangement, in turn, increases the stammering, until in some severe cases, the result is a complete collapse.

While acknowledging that stammering is usually due to heredity, I desire to express my opinion that the stammerer is *made*, not born, in that the condition may be aggravated through neglect or relieved by care and attention.

The question may arise as to the difference between the respiration of stammerers and of persons of normal speech. The stammerer, suffering because of his inability to speak, endures constantly great mental strain. This tax upon his energies causes him to speak on what may be termed *exhausted breath*, resulting in an expulsion of air from the lungs, which struggle produces a collapsing or inward movement in the diaphragmatic region where the last of the air supply is apparently squeezed out from the chest. Words, as a result, are broken and

unintelligible utterances. One who stammers severely will tell you that a prolonged struggle to speak is followed by a cramped and exhausted feeling at the waist line in front, below the point of the sternum. This condition results from abnormal breathing—therefore, the value and indispensibility of breathing exercises.

Important as we find breathing exercises for the correction of exhausted breath—still greater is their purpose in the scheme of control.

Stammering is the inability of the mind, under certain conditions, to control the muscles of the body; in other words, it is the inability to coördinate the mental desire with the physical execution of that desire. *Stammering is not physical, it is mental.* The manifestations, of course, are physical, but the seat of the disease is hidden. Its manifestation may be observed in the inability to perform any muscular action. Those who play the piano may stammer in their endeavors, even when the music is thoroughly understood. Stammering manifests itself in certain individuals in writing; in the walk of some; in the singing of others. Most frequently, however, is an affliction manifested in the organs of speech.

Inasmuch as stammering is the inability of mind to control muscular action, breathing exercises are beneficial in the treatment of the disease. They accomplish discipline, thereby establishing the ability to control,—wherein the stammerer is deficient.

#### BREATHING EXERCISES

In the observance of any rules laid down for exercising the will, the stammerer should continually keep in mind the fact that the purpose sought, is control rather than development. This applies especially to breathing exercises. The mind should be constantly centered upon one thing, that each physical movement is obedience on the part of the muscles to certain mental commands; that the mind is master, and that the muscles must obey. Standing in an erect position, with the palms across the

upper chest, the student may exercise chest breathing. Let him inhale slowly through the nose, expanding the body under the hands. Having repeated this exercise a number of times, he may now practice costal breathing, expanding the body beneath the arm pits. In this exercise, the walls of the sides should be pushed outward and upward without elevating the shoulders. He may now inhale, forcing out the muscles of the back. In this exercise the hands may be placed on the back, thumbs forward, the back of the fingers covering the dorsal muscles. He should be careful not to bend the body in this exercise, otherwise it is difficult to note whether there is expansion and contraction under the hands. This may be termed dorsal breathing. Let him now practice abdominal breathing, forcing the abdomen out as much as possible during inhalation and allowing the muscles to contract as much as possible during exhalation. Diaphragmatic breathing may be practiced, in which exercise we inhale with a view of forcing down the diaphragm, expanding the entire circle of the waist. He may practice full breathing, exercising the will simultaneously over all the muscles brought into action in the previous forms of breathing. Effusive breathing, next engages his attention. This is a natural emission of the breath on the sound of the letter *h*. Expulsive breathing may be practiced in which is demanded a gradual and forcible expulsion of the breath on the sound of the letter *h*. He may practice explosive breathing, suddenly exploding the breath on the sound of the letter *h*.

In practicing these exercises, each one should be repeated a number of times before the pupil passes to the next. One thing he should remember, and this thought should be frequently emphasized: that the purpose sought for is control. Let him construe the exercises in various ways, practicing in calisthenic drills, inhaling through a number of counts and exhaling through the same number. He may also practice while walking, inhaling and exhaling during a certain number of steps. Thus, while

he is out of the Institution, as also during the time he is under the observation of his teachers, he can, through self-effort, aid in disciplining the muscles concerned in breathing until he is finally able to control them under all conditions.

#### VOCAL EXERCISES

Vocal exercises may now be practiced, the student keeping in mind constantly that control and not development is the object sought for. Stammerers are not lacking in vocal ability, the majority of them having voices as strong as persons of normal speech. What they do lack, however, in this respect, is the ability to control their voices; as is evidenced by the fact that under certain conditions many of them are wholly unable to vocalize or to utter a word. I have known hundreds of stammerers who possessed powerful, deep, resonant voices, yet who were at times totally unable to speak because under certain conditions they lacked the ability to produce voice. In other words, at times, they were entirely unable to control the muscles and organs concerned in voice production, and it is with a view of establishing this ability to control rather than of cultivating the voice, that vocal exercises in connection with methods for the cure of stammering and stuttering, should be practiced. Any good system of vocal exercises will suffice and will accomplish the object sought for, if practiced regularly and faithfully, but the following are suggested as especially applicable for the cure of stammering and stuttering.

Vocal exercises hold an important place in a beneficial course of treatment. The voice should be so exercised as to give freedom and right direction. "The primary sound of the larynx is short *a*, or approximately this sound." Each vowel sound requires a nice adjustment of the vocal organs.

Care should be taken to assume a correct standing position before any vocal practice is attempted. The logical order of practice is that of physical exercises,



then the specific breathing exercises, and last the voice work proper, that the system may be at its best when the vocal work is undertaken. Give the vocal organs proper position, that there may be a maximum of result with minimum of effort. Open the throat and protrude the lower jaw somewhat, that the sounds may have ready egress. Then utter the sounds of the vowels—*a, e, i, o, u*—in a natural tone of voice. Variations of this exercise may be formed by combining the various consonants with the vowels: *la, le, li, lo, lu; ma, me, mi, mo, mu*. Each new combination of sounds should be accompanied by renewed effort, to impart the quality of the sound.

The utterance of the vowels, with full force, calling upon the diaphragm to enforce the sound, is another step in progress. This practice should be undertaken with moderation. Otherwise the vocal apparatus may be overtaxed by too great effort at first.

The next step in vocal exercise may be that of commencing a vowel sound in the natural tone of voice, which is gradually swelled to full force, decreased to natural tone, then up again, thus alternating the natural tone with full force, five times upon each vowel sound.

Sound each vowel, pouring forth the tone, letting it flow gently through the vocal passage. Follow this by the practice of vocal sounds emitted by a forcible stroke of the abdominal muscles, allowing the sound to subside gradually. In this exercise, the chest should be well expanded. Aim next at the production of clear sudden vowel sounds, which are so uttered by a vigorous abrupt action of the abdominal muscles upon the diaphragm.

Variety of practice, which increases vocal power, may be had by beginning the sound of each vowel with slowly emitted breath, increasing to full volume, diminishing by degrees, thus producing a swell. Exhale all the air through the mouth. Inhale through the nose, fill the lungs to their fullest capacity, then sound each vowel with a firm, steady tone, terminating abruptly. Caution is required in this practice that the muscular system may not be overtaxed.

By a tremulous movement of the chest muscles utter each vowel sound with tremor, prolonging the sounds.

In conclusion, take a deep inhalation and concentrate extreme force upon the utterance of each vowel. The climax should so represent the height of vocal effort that the same result cannot be produced without renewal.

The stammerer must be in the highest degree faithful to this practice and exert his mind upon each exercise to reap the fullest results—otherwise he becomes an automaton, making little advance from mediocre. The conscientious student, focusing his mind upon every detail of this vocal practice, may reap untold benefit.

Many other exercises could be mentioned, but this will give some idea of the variety. Throughout the study, every opportunity should be taken to establish right ideas of true *tone values*.

There are, of course, numerous other things to be considered in the treatment of stammering and stuttering, in addition to the exercises which I have endeavored to here illustrate, yet these are important, and, if carefully followed, will aid materially in establishing the equilibrium of control, which in stammerers apparently is lacking. A knowledge of the elementary sounds of the language and of the correct positions of the organs of articulation, together with practice in forming sounds, both singly and in combination, will also aid in giving the stammerer better control, and this I would advise every one thus afflicted to acquire.

Methods for the cure of stammering, as applied in the Institution, are more comprehensive and complete than I have here outlined, my purpose here being to show the relation only of one feature of our work to the cure of the malady, viz.: physical, breathing and vocal exercises. Our work embodies many other features equally as important, although none receive closer attention. Six hours daily are set aside for class instruction, in addition to which, *every pupil receives daily such special private instruction as is necessary*.

Progressive Institutions for the care of stammering welcome the advancement in physical culture; for every facility which brings the man-physical nearer to a condition of nervous poise and equilibrium, is bringing nearer that fine indispensable correlation of mind and muscular action which is indispensable to him who would be speech free.

## CURES FOR STAMMERING

It is not my intention in this article, as the title to it might imply, to enter into discussion of the many different methods for the cure of stammering that have been suggested or practiced during the past decade, as much that has been written or advised has been absolutely worthless. I will endeavor to give the reader, as far as possible, my ideas with suggestions for practice gained from an experience of many years in the treatment of thousands of cases of stammering, and will confine my views wholly to modern methods of cure.

A cure for stammering, in my estimation, cannot be accomplished without an exact knowledge of the conditions leading up to the cure and thus, in order that the reader may intelligently understand his position, I shall endeavor to set forth in as clear a manner as possible a few suggestions that I trust will prove of permanent benefit to anybody who may carry them into execution. Everything we do, everything we eat, even our thoughts have either a direct or an indirect bearing upon our fluency in talking, and for this reason a method for the cure of stammering must embody much. It must aim not only to overcome the habit of stammering, but must also change the sufferer, his likes and dislikes, as well as his manner of viewing things. It must change his view of the world generally. The difficulty in the past with many who have engaged in the work of treating the stammerer has been that they have regarded a method for the alleviation of his suffering without much attention to the permanency of the cure,

whereas, they should have sought a method of establishing permanency, even though the results at the beginning were less encouraging.

#### CONFIDENCE IN THE INSTRUCTION

The one necessary element to success at the commencement of treatment with any stammerer, is confidence in the instruction which he intends to follow. If he enters into the work with doubt in his mind concerning the outcome of his efforts, he will invariably fail, in fact, his success will be in ratio to his belief and for this reason it is wise to believe. It costs no more to believe than it does to disbelieve, and the results are always much more satisfactory with confidence and belief as backing. Stammering is in a sense a lack of confidence or is disbelief. One is not sure they cannot say the word until they try, but somehow or other they do not believe they can. Is not that disbelief? Others are sure they cannot, but find, when they try, with the addition of a little energy and effort, they can. Others feel that they can, but when they try they lose confidence in themselves and find they cannot.

Thus it is often this feeling of confidence, and the mental effort at the moment of trial, that has to do with the certainty of utterance. Confidence is everything, and should be especially cultivated by stammerers who lack it so much. I have known of several cases of stammering that have been permanently cured through summoning and holding to their aid confidence. Some four years ago a gentleman entered my school for treatment, who stammered so badly and whose contortions of features were so severe, that it was positively painful to listen to his efforts at utterance. I remember well that he came to me at the end of his fourth or fifth day and requested me to remove him from silence, which I hesitated in doing from the fact that his case was so painfully severe. After a time, however, upon his promise that he would never stammer again if I complied with his request, and with his promise to return again to



silence if he should hesitate or stammer, as a matter of experiment I tried him, and to my great astonishment he talked perfectly, and since that time, four years ago, notwithstanding the fact that he remained in the institution but ten days, he has never stammered once. This cure was a most remarkable one from the circumstance that the man had stammered many years, and goes to verify my claim that confidence has much to do with the cure. I subsequently asked him to explain to me his own idea with reference to his remarkable cure, which he explained by saying that he attributed it to the methods employed to effect it, which I myself doubt, as I fully believe that the cure was effected and has remained permanent largely through his belief that it would thus be; in other words, the cure was established through the confidence and belief in the efficacy of the methods rather than by the methods employed to effect it.

I know of another instance where assertion and will alone accomplished a cure which, once established, has remained permanent. A young man of less than twenty years of age made a vow and sacred pledge on his word of honor that he had stammered the last time he ever would, and to my knowledge he has never stammered since.

Numerous other instances might be cited to prove the value of confidence in the treatment of stammering. Whatever you believe,—believe with your whole heart, that the result of your effort will be successful, because without this confidence, which is necessary, you cannot succeed.

#### CONFIDENCE IN THE INSTRUCTOR

Confidence in the instructor is as necessary as confidence in the instruction, as without it all effort will be unrewarded. During the last five years I have had but little to contend with in this respect, but very early in the history of my work, when I was just establishing my reputation, I often met with persons who, I imagined, were rather doubtful of my sincerity. That

this militated against their progress, there is no question, as in order to obtain the best results from treatment it is necessary that the pupil place implicit confidence in his instructor as well as in the efficacy of the instructions he receives. Since my reputation has become so wide and extended, and since the attendance of my institution has grown so large I have had little or none of this former difficulty to contend with, and firmly believe that the result to my pupils has been much better in consequence.

#### A SOUND BODY NECESSARY

There is no question but that the physical condition of the stammerer has much to do with the severity and aggravation of his impediment, as is manifested in cases of the intermittent class. Persons in weak physical condition or in ill-health usually have much more severe contortions, greater manifestations and more difficulty than persons in robust health. But you say, "I have seen persons in good health who stammered terribly." My reply is that these same persons, if in ill-health, if constitutionally weak, would stammer even worse than they now do, and most violently. All authorities of modern times are agreed upon this, that the condition of the sufferer physically has much to do with his fluency of utterance. Thus in such cases, especially in the intermittent forms, it is necessary that stammerers keep themselves in as good physical condition as possible. A good system of physical exercises in any good gymnasium, or without gymnasium with plenty of out-door exercise, such as walking, running, rowing, hunting, etc., with special care to cleanliness in bathing, will be found excellent and will, by improving the physical condition of the stammerer add also to his ability to speak more easily.

#### CLOSE MENTAL APPLICATION HARMFUL

I know of nothing more aggravating to stammering, and there is in my mind nothing more harmful to persons thus afflicted, than close mental application. This is especially

true of students who stammer and who find, after hard study and close mental application, that their difficulty has become much aggravated. Many parents have related to me the fact that their children stammer more during school term than during holidays, which is but an evidence of the truth of my assertion. I can well remember that as a boy in school my own difficulty was more severe than at any other time, which was probably due to the fact that study for me was hard, as I required to apply myself more closely than other students in order to gain the same knowledge, which always served to aggravate my defect. It was because of this fact that I decided to leave college, being at that time unable to recite orally or to keep up with my classes. I can remember my father calling my attention to this, that I stammered more when I studied hard than at any other time.

This is true in all cases of stammering, as has been evidenced to me in the many pupils who have applied to me for relief. I know of a number of cases of stammering that have been developed wholly as the result of close mental application or over-study. It seems to me that one does not gain much more from this procedure, when what is gained is won at the loss of so much that goes to make up our happiness.

Many cases of stammering that could have been very easily remedied at an earlier stage in the progress of the difficulty, have been allowed to develop and in this manner by over-application, mentally have been made chronic.

#### CHEERFULNESS A FACTOR

That cheerfulness enters into the problem of the cure, no experienced person who has had to deal with stammering, will question. You must keep cheerful if you will be cured. That this is true is shown by the fact that persons of sunny dispositions, affable manner and light heart are more susceptible to successful treatment than persons of sullen or morose nature.

I remember a young man from the State of Washington who, several years ago, came to my institution for treatment, and who was one of the most disagreeable and sullen fellows I had ever met. It was several weeks before we could gain the man's confidence or notice any marked improvement in him, and although we finally succeeded in effecting a cure, we could have accomplished the same result in one-quarter the time, provided his disposition had been alterably changed.

A light, buoyant heart, sunny countenance and cheerfulness of disposition should be cultivated if the best results from treatment are to be expected.

Many stammerers have reasons for not possessing these admirable qualities, but now that the gift of unimpaired utterance can be so easily attained, who can be otherwise than cheerful?

#### DETERMINATION

Probably no other factor enters into a cure for stammerers with equal importance to that of determination. Determination in the cure is of more importance than any fixed set of exercises or rules, because without it none can succeed. Stammerers usually are not men of determination; I say usually, because there are always exceptions, and I have known of several who were determination itself. Generally speaking, however, such is not true, as in the majority of cases that have come under my observation, will-power and determination were lacking. Will-power can be cultivated and the faculty of determination can be strengthened. Not only in the matter of talking is it necessary to add to one's quality in this respect, but in all things. In fact, the man who stammers needs more than anything else reorganization. He must in the first place substitute for his natural feeling of inequality a feeling and manner of equality, realizing always that he is his brother's equal and in many



respects his superior. To do this, it is well for him to court a feeling of superiority, knowing of course in cultivating it the purpose of its cultivation. The old maxim, "Aim high if you wish to shoot high," should never be lost sight of in this connection, as if he wishes to gain the natural feeling of equality with his fellowmen it will be necessary for him to aim higher.

Stammerers are usually not men of self-assertion—they are rarely conceited, never over-bearing and in the majority of instances that have come under my observation (and I have talked with thousands of them) they are willing to submit to the rule of others usually without question. This is not as it should be. It characterizes the stammerer's nature, however, and none can make things otherwise without changing the man generally. Why does he regard himself as an unequal? He realizes in his heart that others have had bestowed upon them by nature, gifts that he has been deprived of, and from this fact realizing that they can accomplish and do things that it is not his privilege to perform, he recognizes from his infancy his natural inequality. His unhappy thoughts over his difficulty, his hours of seclusion to hide an exhibition of his infirmity, his loneliness in consequence and his feeling of littleness because of his difficulty, naturally change his disposition and alter his attitude and feelings toward others, until at last as the result we find the man a conundrum, pitied by some, ridiculed by many, but feeling in his heart a sense of inequality and in consequence willing to submit himself to the thoughts and actions of others.

This is why reorganization is necessary. Stammerers who wish to be cured of their infirmity should unburden themselves of this feeling, and as mentioned at the beginning, should substitute for it a righteous feeling of equality which in nine cases out of ten is theirs by right of their actual equality with their fellowmen.

One must expect discouragement at the beginning. This feeling is not apparent in the institution, where every-

thing has a tendency to the opposite, but with unaided effort, under which conditions a cure in some cases would be most difficult, one must expect it. There should be no lack of effort because of this, however, because life at the best is a succession of battles, of successes and failures, with many things to discourage as well as to encourage. I feel safe in saying that the majority of our business men connected with large enterprises have had as many obstacles to surmount and at times as many causes for discouragement as the majority of stammerers would experience through unaided efforts toward a cure. Failure should serve to awaken in us a greater determination to succeed, and if so regarded will surely lead to success in the end. After the first discouragements have been passed, the path to success becomes easier and the stammerer will find through persistent determination that his efforts to succeed will finally win.

The reward in the end is thus greater than was anticipated, because where the student starts out to accomplish but one object, viz., a cure for his stammering, he finds that not only this end has been attained but also that he has been improved and bettered in every conceivable way. Because he can now talk and converse fluently, he can enter into enterprises which before were to him unsafe propositions. His manner has been changed, his disposition has become more buoyant; he is, in fact, a different man; regards the world from a different position and in a manner even as the world regards him. Do not be discouraged at the beginning but work with a will and determination to win and you will be rewarded for your effort accordingly.

## AN ANALYSIS OF THE MENTAL CONDITION OF STAMMERING

The subject of stammering is one upon which volumes could be written, and yet much that is important would still have been left unsaid.

In view of this fact it will be the aim of this article to select one special and important feature, and treat of this particular feature in detail.

That the mind plays the most important part in the majority of cases of stammering, if not, indeed, in all cases, is admitted by all who have devoted themselves to the correction of speech defects, and this fact is also generally realized by stammerers, themselves.

Stammering is essentially a mental trouble, though the manifestations of it are, of course, largely physical.

The mental side of stammering will, therefore, be the subject of this discussion; and, in so far as it is possible to do so, this phase of the trouble will be discussed to the exclusion of all others. Not that due importance is not attached by the writer to all of the other varied and subtle influences which conspire to produce stammering, but rather because the writer feels that these other matters have already received more attention, and have been more thoroughly discussed than has the mental side of this complex subject.

Taking it for granted that the reader understands all that has been written of the reasons why people happen to stammer or stutter; of the formation and purposes of the different organs used in the production of speech; of the importance of rhythmic breathing, practices in vocalizing, physical exercise, rest, diet, etc., and of many

other things which are absolutely requisite for the success of any one who would undertake to overcome this impediment, we will now devote our remarks solely to the discussions of what we believe to be the vital principle underlying any successful method for the cure of stammering—the principle which, if correctly understood and applied, will prove the very keystone with which to cap the arch you are undertaking to build up towards a cure.

All stammerers know from experience that different mental states are productive of correspondingly different degrees of intensity in their impediment—certain conditions of mind affording comparative freedom of utterance, while other conditions are productive of difficulties approaching absolute dumbness.

Were you never impressed by the importance of these problems? Did it never occur to you that such effects as these must be the natural result of the definite causes, and that you might, by analyzing these effects, discover a principle, which, if intelligently applied, could be made to prolong these periods of immunity from stammering, and eventually lengthen them into a permanent condition, thereby working out your own cure?

It is likely that this thought has presented itself to the majority of stammerers; but, with that peculiar indolence which seems to characterize the temperament of persons who stammer, you have, doubtless, lacked the energy to trace back the process step by step from effects to the logical causes underlying them, and to determine then and there that conditions, which afforded even temporary relief from the enemy, were conditions well worth cultivating, and then to set about this task of cultivation with energy and resolution.

The writer was no exception to this rule. For years he had been stammering with varying degrees of intensity—sometimes very badly, and at others almost wholly free from a trace of impediment; yet, he had never awakened fully to the realization that what had heretofore proved a temporary relief, dependent upon circumstances, might,



by systematic effort, constant watchfulness and exercise of will power, be made a permanent state of affairs within the control of himself alone, and not subject to the caprice of extraneous conditions.

When he did awake, however, to the realization of this truth, and began to make the application of it the chief object of his life, then, from that day forth, his improvement was rapid.

It must not be understood from this statement, however, that there were no discouraging setbacks experienced, for there were, in fact, many; but each one served only to make him more determined to press forward into the domain of untrammelled speech, for he felt certain of being at last upon the right track.

Careful analysis of mental and physical conditions during these occasional periods of comparative freedom from his impediment, showed, first of all, that his mind at such times was tranquil and free from worry; there was no contraction of the solar plexus, but, on the contrary, a free and relaxed feeling existed in that important nerve center; his spirits were cheerful, and his breathing and heart beats were rhythmic. In a word, there was complete mental and physical relaxation.

These, then, are the conditions which must be cultivated and made permanent, if possible. But how?

Going back inductively, step by step, and analyzing his mental processes in order to discover the causes responsible for the conditions referred to, it soon became apparent that FEAR was the great underlying evil responsible, either directly or indirectly, for the disturbances in the mental and physical functions resulting in stammering. The manifestations of this fear are oftentimes so subtle, and are displayed through such devious channels, that its actual responsibility for the trouble might at first be questioned. But careful investigation will show in the end that fear is the real cause, disguised, however it may be, in the form of worry, doubt, apprehensiveness, timidity or lack of self-respect; and, unless

this fear can be uprooted and banished from the mind of the stammerer, he will never be free from his impediment.

Restoration of confidence is, then, the first thing to be accomplished.

This truth is known to nearly all stammerers. In fact, they feel it instinctively, and will often tell you that, could they but wake up some morning free from the feeling that they had ever stammered, and free from the ever-present fear that they were bound to stammer, the result would be that they would never stammer again. They are simply held in thrall by this overmastering fear.

How, then, shall this arch enemy be dislodged from the position of ascendancy which it has gained and held for so long a time in the consciousness of the stammerer?

Can it be driven out and routed by a sheer act of will on the part of the sufferer?

No, it cannot. Powerful though the will may be, it is yet unequal to such a feat as that. It must call to its assistance other agencies working under its direction and control.

The human mind is composed of two functions, or planes, of effort. One, the active function, is called the objective mind, and its office is to attend to the original and volitional thinking. The other function is purely passive in its operation, and is called the subjective or sub-conscious mind; and, though in a way inferior to the objective mind, it really dominates our daily lives, unless we know how to control it.

It is the function responsible for all our habits, and is, therefore, the one which we must consider most carefully in the cure of stammering.

The subjective mind is not hard to influence, yet, when it has finally accepted a thing, and has become accustomed to doing this thing, there is but one way to change its course, and that is by telling it over and over again just what you wish it to believe, and it will, in time, not only accept the new suggestion, but will end by being as fully set in the new way as it was in the old.

The suggestions upon which the subjective mind acts, may come from your own objective mind, or they may be given by an outside person. But in either case the suggestions must be given with positiveness and a conviction of truth, in order to properly impress the subjective mind, and to be finally accepted by it as truth.

This is the secret of destroying bad habits of thought, and building up character.

The fear of stammering has become a fixed habit of thought in the subjective mind of the confirmed stammerer, and, of course, the longer the trouble has existed the harder it will be to remove, and its removal must necessarily prove a matter of gradual accomplishment. Little by little you will have to efface, by a reverse process of thought, the deep impressions which have been made upon the subjective mind through years of stammering.

To accomplish this result by sheer force of will, is an utter impossibility.

It is not an uncommon thing for persons who have never stammered, to tell one thus afflicted that, if he would exercise sufficient will-power, and determine not to stammer, he could free himself from the impediment. Such persons know absolutely nothing of the psychological conditions produced by stammering, and in turn producing stammering; they have no conception of the deep and far-reaching effects which this habit has wrought in the stammerer's entire organization.

Most stammerers are not only persons of average strength of will, but often by very reason of their constant struggle with this impediment, they develop unusual will-power. And their minds are not only as active as are those of the average person, but are frequently found to be more alert and sensitive in the reception of impressions.

The trouble is that a chronic stammerer is virtually hypnotized into stammering through the ever-present fear that he is going to stammer; and this fear, having become firmly enthroned in the subjective mind through-

out years of stammering, makes it as impossible at times for him to talk without stammering, as it would prove impossible for him to bend his arm after having been really hypnotized by a professional hypnotist, and told that his arm was rigid and that he could not bend it.

Day after day, and many times each day, through the years of his affliction, when called upon to speak to his fellow-men, he has experienced that fearful sinking feeling born of the conviction that he was going to stammer; that he could not help stammering. Each conviction of this kind was a suggestion to the subjective mind, and each one, being accepted by the subjective mind as truth, did its full share towards strengthening the hold which this terrible habit gains upon its victims.

In other words, the stammerer constantly suggests to himself fear, and, by this auto-suggestion, he gradually produces results just as real and unmistakable in their manifestations upon himself as does the regular hypnotic suggestionist produce upon his hypnotized subject. The only difference is that, in the case of the stammerer, these results usually require years in attaining complete fulfilment because of the fact that his objective mind, backed by the will, is alert, and does a great deal to neutralize the influence; while in the latter case there is no such active agent to thwart the suggestionist, and the result is that the subjective mind of his unconscious subject yields quickly to his influence. The principle, however, is identically the same in both cases.

Many persons, realizing this truth, have concluded that stammering could be cured by post-hypnotic suggestion; and, indeed, many professional hypnotists of more or less honesty have undertaken to remove the impediment by such treatment. The results, however, have been uniformly unsatisfactory. Post-hypnotic suggestion will not permanently cure a case of stammering.

In making this assertion, the writer feels that he can speak with some authority, having not only investigated many such cases, but having gone through a most inter-



esting and exhaustive test, extending through several weeks, at the hands of the foremost exponent of hypnotic suggestion in the United States—a man of the finest character, a psychologist of note and professor emeritus of one of the leading universities in the east.

Many other functional disorders, both mental and physical, yield readily to such treatment, but the cure of stammering lies beyond its reach.

Having established these facts, we are now ready to consider the best means for removing the fabric of fear and lost confidence, which has its foundations so deeply sunk in the subjective mind of the stammerer.

There is no sudden or miraculous means available by which it may be dismantled, as we have previously intimated; no sheer act of the will, as we have said before, is capable of removing it by force, though, in the method which is now to be explained, the will is a most powerful and necessary ally.

This structure of error, which, by wrong thinking, the stammerer has erected bit by bit, and has made an actual part of himself, must be removed just as it was erected—little by little, one stone at a time—until, as we gradually establish in the subjective mind that feeling of confidence which is ours by right, the structure of fear will gradually crumble on its foundations, and the work of removal will then progress with a rapidity truly amazing.

To begin this work of demolition, we select the time when the subjective mind is in its most receptive state, which is at night. During sleep, the body and all its functions are in charge of the subjective mind, while the objective or active mind, which includes the will, is off duty. Therefore, impressions which are taken with us into sleep, produce unusually deep effects upon the subconscious part of our being.

The truth of this is, of course, known to all. Who has not tried the plan of falling asleep at night with the thought uppermost in the mind that he must wake

at a certain hour in the morning—the result being that he did awaken at just that hour? And after this practice had been indulged in for a short time, did it not soon become a fixed habit—no trouble being experienced in awakening regularly at the proper hour through failure of the subjective mind to attend to the suggestion which had been given it?

Upon this same principle, then, you can confidently undertake the work of changing fear-thoughts to ones of confidence—replacing that sinking thought of, “I can’t” with the boyant feeling of, “I can and I will”—which results, when once accomplished, will mark the greatest advancement you have ever made in your struggle for freedom of speech.

That may sound rather startling, but it is the simple truth, as you will find out for yourself if you will only try this plan, conscientiously and with full confidence in its final success. That is the secret of all success—confidence.

When you lie down for the night, obtain a position of perfect ease and comfort. Breathe deeply and rhythmically, while you relax the tension from every nerve, and dismiss all worries and distracting impressions from the mind. Continue the deep breathing until a feeling of complete calm steals over you, and then fix your thoughts quietly and with concentration upon the words, “I am confident.” Think deeply of the meaning of those words; think of the characteristics of persons who are confident, and of the air of poise, self-possession and deliberateness which such persons manifest.

Then form a picture of yourself as possessed of these same qualities. See yourself in imagination—calm, self-posessed and deliberate in your daily relations with men. Picture yourself addressing your employer, or a shop-keeper, or a stranger on the street—meeting them tranquilly, looking them steadily in the eye, while you speak to them confidently and without any thought of stammering.

In fact, the thought of stammering must not be allowed to intrude itself at all upon this mental picture, which you are projecting with all the realism of which your imagination is capable. If it does intrude, banish it at once, and concentrate your attention more strongly upon the thought that you are uniformly successful throughout the pleasant day-dream in which you are indulging.

Nothing should prove easier for the stammerer than the perfect and realistic creation of such mental pictures as this; for nothing appeals more strongly to his imagination and desire than the thought of himself exercising the function of free and natural speech.

When indulging in this exercise, remember always to keep strongly before you the impression that your words come freely, with a full, steady tone, the control being from the diaphragm. After a little practice you can lose yourself so completely in the realism of these impressions that you will feel that it is impossible for the other person to disconcert you, hurry your utterance or make you stammer, even if he should try. This feeling of supreme confidence is what you must aim always to produce.

Indulgence in these exercises, instead of keeping one from sleep, tends naturally to promote slumber—the breathing being deep and regular, the nerves at rest and the imagination pleasantly occupied. And when the feeling of slumber does overtake you, do not resist it, but, on the contrary, welcome it; for these pleasant and inspiring impressions, in which you have been indulging, will then be carried with you into the realm ruled over by the subjective mind, and will continue to work their results—their very best results, in fact—while you are sleeping.

And these results are manifold. While such impressions remain in the subjective mind, cheerful and restful dreams will be the rule, instead of the usual harrowing and exhausting visions which visit the stammerer's slumbers, and in which he again lives through the trials of the day—his respiration irregular, his nerves excited and

his muscles tense, and from which he awakens in the morning, depressed mentally and exhausted physically, only to take up one more day of humiliating experiences.

The practice of the above-described mental exercises will, if persisted in night after night, soon become, through the law of association of ideas, a natural habit of the mind; the mental pictures will arise of their own accord as soon as you lie down for the night, and the deep breathing and general relaxation will also, in time, become natural.

The general effect upon the nerves will soon begin to make itself manifest, and the physical well-being will improve correspondingly.

After but a week or two of this practice, you will begin to wake up in the morning with such a sense of buoyancy and light-heartedness, that you will wonder what it is all about. And these feelings will not disappear upon arising, but will go with you into the day, gathering additional strength each succeeding morning to accompany you a little further amid the day's trials, fortifying you more strongly against that feeling of panic which seizes the stammerer when called upon to talk. This sense of buoyancy and poise which you have been storing up during the unconsciousness of sleep, will also enable you to rally more quickly and hopefully whenever you do happen to have a trying ordeal of stammering during the day.

Indulge in these exercises not only upon retiring at night, but also during any wakeful hours you may have during the night; though, after you have once established the habit of practicing the exercises at the time of retiring, you are not likely to be troubled very often with wakeful hours. Yet, if you should find yourself awake in the course of the night, these hours can be materially shortened, and at the same time turned to good account, by indulging in the exercises instead of allowing the mind to rove at will, busying itself, as it usually does at such times, with trifling and fruitless worries. Relax com-



pletely, then concentrate your thoughts quietly upon the pleasant and soothing mental picture described above, and you will soon drop off again into sleep which will prove not only sound, but refreshing.

During the day you should indulge in these exercises whenever you can find a good opportunity. Secure, if you can, a quiet place, removed as far as possible from distracting sights and sounds, where you will be alone with yourself; and, having banished by an effort of the will, all worries and disturbing thoughts from the mind, draw vividly the picture of yourself in the role of a calm and fluent speaker. You will soon learn to assume this role just as an actor does, and in time it will get to be second nature to you, thereby becoming in the end a natural part of yourself.

The effectiveness of these exercises will depend largely upon the degree of concentration of which you are capable; therefore, cultivate the power of concentration. It will not only add to the success of these mental exercises, but it is absolutely essential to complete success in any line of human endeavor.

The man who possesses the ability to concentrate all of his attention upon whatever he is doing, shuts out all distracting impressions, and thereby reaps the full benefit of all thought-force expended. The effect may well be likened to that of a sun glass, which gathers the rays of the sun to a focus, thereby increasing many fold their heat and brilliancy. So it is with thought: diffuse it, and you get but feeble results; focus it upon the one thing in hand, and you not only achieve results of high order, but you get them far more quickly.

In the possession of this important faculty of concentration, stammerers are usually deficient—sometimes, wholly lacking. In fact, diffusion of energies, both mental and physical, on the part of the stammerer, is responsible to a great extent for his inability to talk properly. This power to concentrate should be cultivated, then, more assiduously by the stammerer than by other persons not thus afflicted.

The man who has really mastered the art of concentration, has in his possession a sure panacea for that form of depression known as "the blues:" he has but to concentrate persistently upon a bright and cheerful subject, entirely shutting out the other distracting impressions, and the blues will be powerless to affect him.

Besides practicing these mental exercises at the times already suggested, you should also resort to them immediately after a trying ordeal of stammering, when you are, naturally, depressed by your lack of success. At such times a stammerer usually lapses into a state of abstraction as he reviews in his mind the details of his recent humiliation, and then gives himself up to the most depressing thoughts.

Nothing could be more foolish than this. You are simply deepening the ruts already worn into your subjective mind.

Turn instantly to the other picture. Rally to it with all the power of your will, and refuse to consider the failure you have just made. Remember, that all failure is victory in the end if you but turn it to proper account. Call up the recollection of any successful, or even comparatively successful, experiences in talking, which you may have had during the day. Dwell strongly upon these experiences, drawing from them encouragement and determination to succeed. Remember what Emerson says in this connection, and apply his philosophy to yourself, for to no one is it more applicable. "Nerve us," he says, "with incessant affirmatives. Don't bark against the bad, but chant the beauties of the good."

Consider your mind as an art gallery, filled with pictures of all kinds—some gloomy and depressing; others bright and uplifting. Now, when you go into a real gallery, do you deliberately choose a seat in front of the darkest and most forbidding picture, and then give yourself up to the contemplation of it? No; you pass such pictures with a cursory glance, and seat yourself before one which appeals to you strongly on account of its beauty and worth.

Follow the same plan, then, with your mental impressions, ignoring the bad, and cherishing the good, and you will soon find that your spells of depression, after stammering, will grow gradually less, until in time they will rarely affect you at all.

Right here it may be well to add that nothing is more potent in helping to drive away depression, and raise one's spirits, than the effect of deep breathing. Always remember to breathe deeply, slowly and rhythmically while engaged in these exercises. The increased supply of oxygen thus taken into the body has an almost instantaneous effects upon the brain. Ten deep breaths, taken slowly, the air being held for a few seconds, and then slowly exhaled, while the mind engages itself in proper thinking, will dispel a fit of depression almost magically. If you have never tried it, do so now, and be convinced.

You will have to watch yourself closely in order that you may not, through long established habit, drop into those spells of morbid introspection so characteristic of stammerers, and so injurious in their effects. Break them up at once by a vigorous exercise of the will.

Make it a practice also to examine yourself frequently to see that you are not in that state of mental and physical tension peculiar to stammerers. Endeavor constantly to replace this condition with one of complete relaxation. See that your solar plexus does not feel contracted and cramped, but free and comfortable. This important nerve center, sometimes called the "abdominal brain," is directly affected by the breathing; so, when it causes you that nervous, cramped feeling in the region of the diaphragm, you may be sure you have forgotten to breathe properly. Relax, then, at once, and breathe as you should.

In a word, whenever you can remember to do so, say to yourself: "*Am I now properly poised mentally and physically?*"

You will find frequently that you have lapsed unconsciously into that state of hurry and lack of deliberateness, so fatal to stammerers; and it is these conditions

which must be constantly guarded against and broken up as soon as you become aware of their existence. Deliberateness, not only of manner, but, what is far more important, deliberateness of thought and feeling, can be thus acquired if you are only sufficiently watchful. Vigilance will, in the end, produce poise; and nothing is more needful to the stammerer in his struggle than is the possession of this quality.

In addition to all these things, the stammerer should learn above all to carry with him constantly the proper mental attitude regarding himself. In spite of whatever discouragements you may have to face on account of your impediment, remember always that this impediment does not make you inferior to other men. It impairs your usefulness, of course, and prevents a display of your real ability, but it must not be allowed to affect the higher being, the real man that you are. Look upon it as but a temporary disadvantage under which you labor, and which, by right thinking and determined effort, you are going to overcome.

Cultivate this feeling strongly, and carry it with confidence. Carry it in your heart, for there is no greater truth than, "as a man thinketh *in his heart*, so is he."

If you form the habit of thinking of yourself along the lines of lack of confidence, discouragement, and "I can't," as stammerers are very likely to do, you will find that others are pretty sure to accept you at your own estimate, and regard you in time as really an inferior person. While, on the other hand, if you will just keep yourself constantly braced up by saying to yourself—and meaning it, too—"I can and I will," you will attract to yourself similar thought waves of confidence and determination, which will do wonders in the way of inspiring and strengthening you.

The man who *thinks* energy and confidence, manifests energy and confidence, and impresses his fellowmen correspondingly. Action follows thought as surely as night follows day.



Cultivate unceasingly, then, the positive mental attitude. By a full recognition of the higher self, you will clothe yourself with an aura of thought which will insensibly protect you from distracting outside influences.

Until now, you have been controlled by the *without*; you have been the plaything and slave of outside circumstances and thought-influences not of your own choosing. Wake up, now, and assume conscious control of the expressions of life! Remember: "The line of evolution in man is towards self-control—conscious direction of the manifestations of life. The animal is fast being outgrown, and *man* is coming into expression."

It is true that the accomplishment of these results calls for exercise of will-power and unswerving determination. But is not the prize—unfettered speech—well worth the effort? "The longer I live," says Buxton, "the more deeply am I convinced that that which makes the difference between one man and another, between the weak and powerful, the great and insignificant, is energy—invincible determination—a purpose once formed, and then death or victory. This quality will do anything that is to be done in the world; and no talents, no circumstances, no opportunities will make one a man without it."

You wish freedom of speech? Then think and claim freedom of speech. Hold the model of correct speech before your mind just as the sculptor holds the model of the statue he is creating from the marble. Hold it persistently, "in your heart," and you will succeed. The key to this truth is the words, "*in your heart.*" It must be held there as a profound conviction in order to have full effect.

The value of confidence in the efficacy of these exercises cannot be overstated. We must repeat, that with confidence in the outcome, you will get results far more quickly than if you go about the practice of them in a skeptical, half-hearted way. Confidence alone, has won many a battle. If you hold but a feeble, half-hearted expectation, you will be rewarded with but feeble, half-hearted results.

Let your subjective mind see that you really believe what you say, and it will have confidence in your statements, will accept them as correct, and will act accordingly.

And now a word or two more regarding the arch-enemy, FEAR-THOUGHT. Remember, that in whatever guise this enemy may intrude itself, it must be banished instantly.

The subjective mind will, of course, continue for a time to thrust such thoughts upon you, having been so long established in this practice, and having found in the past that you gave such thoughts a friendly welcome—even dwelling upon them to the exclusion of almost all other impressions. But if you will set your face resolutely against this serpent, which you have cherished so long in your bosom, to your great injury; and, if you will only drive it away as soon as it presents itself, not waiting for it to actually gain admittance, you will soon find that it will become discouraged, and will slink off quickly. In time it will cease from bothering you.

Be vigilant and determined; nothing more is required. The very simplicity of these principles may cause some persons to doubt their efficacy. Their truth, however, is well known to every psychologist, or student, in the realm of thought; and their presentation here has been made especially simple in order that they may the more easily be applied by every stammerer in working out his cure. The great majority of stammerers who may read this, will, we feel certain, recognize instinctively the soundness of these principles, and the practical value of the method which we have formulated from these principles. If, however, there should be any readers of this treatise, who may doubt the benefits likely to be gained by adopting this method for the relief of their impediment, we would only say: be not skeptical, but set about practicing these exercises at once, confident in the knowledge that you are engaged in the application of a great

psychic law, and let the results take care of themselves. In time, they will seem to you little short of marvelous.

You must not be discouraged if these results do not materialize as quickly as you would like. Remember, you are undertaking to dismantle a structure of error which has been building for years. At first the beneficial effects may appear but slowly. Then, gradually, you will awaken to the realization that you are beyond any doubt effacing from the sub-conscious mind those destructive thought-habits which have all but wrecked your life, and that you are succeeding in replacing them with correct habits of thought which are uplifting you mentally and restoring you physically; and when this conviction does present itself, unmistakably, you will grapple to this method with all of the force of your will, strengthened by desire.

Not only will you have freed yourself from the habit of stammering, by this system of mental training, but you will, at the same time, have cultivated and established those qualities of character—concentration, confidence and determination—qualities which are, alone, well worth any effort you may have put forth.

The effects are produced like the dripping of water upon the stone; it is the working out of a physical law in the psychic world.

To establish the correct attitude in the mind of the stammerer, is half the battle; and any treatment which will restore to the stammerer that natural confidence in which he is so deficient—such a treatment must be of paramount importance.

To supply this essential part in the cure of stammering is the writer's chief aim.

"There is no chance, no destiny, no fate,  
Can circumvent, or hinder, or control  
The firm resolve of a determined soul."

## WHAT IS STAMMERING?

Stammering has been defined as "incoördination between the will or mind, which wills to do, and the muscles of the body used in making sound." Again, it has been defined as "the inability under certain conditions to articulate or control the organs of speech which are usually under such circumstances, tightly held together, accompanied in many cases by the substitution of one sound for another." Both of these definitions are reasonably good, but neither supplies a sufficient basis whereby we can reason from cause to effect. While I may not be able to supply a better one, something is lacking, through which we might draw an object lesson, and arrive nearer the malady which is so indeterminably interwoven with the important subject of mind and matter. Will not some one present a more progressive discussion of the psychological principles involved? I think such research and exposition will prove profitable.

While there is a technical difference between stuttering and stammering, as a matter of suffering and relief, they are inseparable. The differentiation can be summarized by designating them as speech impediments of compounding degrees. A child stutters before he stammers, and is only a stammerer when the affliction becomes a part of his very being. The question most vital to us is not what is stammering, but to find the key which will unlock the impenetrable fortress which has not only baffled scientists and philosophers for generations, but for all time. By exchanging notes we may be able to enlarge our little world of study and acquire a more wholesome conception of our needs and resume our struggle against teeming odds. While I may not be able to make a substantial contribution, I hope I will not confuse.

All writers upon stammering tell us that the stammerer



seldom, if ever, stammers when speaking to an inanimate object, yet stammers when anyone enters the room. The presence of others never fails to produce a mental effect upon all people. While the stammerer may be a moral coward, the fact still remains, and that cowardice, whether real or imaginary, must be overcome. It is a part of the disease. The mental phases of the difficulty demand careful research. Confidence in self and mental equilibrium must be acquired both in truth and in fact as well as physical well-doing and correctness. The stammerer can usually mimic other people and particularly can mimic sounds, talk to pets, prattle with children and sing without difficulty. This will go to prove that the mental condition of the stammerer is a very important factor in all matters pertaining to action, especially exercising the power of speech.

Able physicians tell us the condition of the mind exerts a powerful influence over the physical conditions of the individual, oftentimes promoting disease and health, and furnishes the basis of Christian science. The very fact that one can speak with freedom when alone, yet stammers before his friends, while another stammers before strangers, is an anomaly, is a subject in itself worthy of the investigation of an advanced psychologist. To many people it may suggest material for the discussion of personal magnetism or the reciprocation of mind with mind. Apart from the mental proposition, all stammerers are very nervous people. Whether this nervousness is the cause or the result of stammering, my observation is too limited to pass judgment. It is sufficient to know that all stammerers are nervous, and stammer little or much as they are momentarily affected and conditions menace. Stammering is both a mental and a physical difficulty. It may be the result of both, and is a mannerism which has many of the elements of habit. It may be said that stammering is largely a habit.

The mechanics of stammering are wide and varied, according to the temperament of the individual. A few

fundamental principles are obvious and common to all.

My readers all know what it means to stammer, and the mechanical and physiological movements which constitute it. It is a stoppage of speech, the result of the inharmonious action between mental desire and physical action. There is always existing and accompanying stammering an element which may be classed as a nervous disorder. It is only conscious to him who is a confirmed stammerer, and who suffers from acute stammering. It is his evil genius and follows him into drawing room and business thoroughfares. His extreme nervousness may conjunctively, with volition to vocalize, momentarily arrest respiration without a physical effort to speak being made. The air passage may remain open during the interval. The extreme nervousness in effect may be compared with an electrical apparatus, surcharged with force; the perfection and utility of the machinery of which will thereby be disconcerted. Probably a better comparison will be to say the result is similar to the workings of a delicate piece of machinery without a governor. In the case of the stammerer his motive powers are unequally distributed, more particularly the nerve ganglia of speech. Seemingly this nerve center is unequal to its task, easily disturbed and uncertain when called to direct force. Seemingly the greater the force and the more vital the occasion the greater the injury. At other times this irregularity appears to be due to a deficiency of patent energy. Such mental discomfiture and irregularity of self-control must be driven away by force. In such event the electricity within the man will be properly distributed to all parts of the body, and local congestion relieved.

Oxygen, the life of all the universe, will not be detained from one who is in such need. When we speak of stammering through the lack of the exercise of the will, we mean that the brain and will do not act in conjunction with reasonable force. Motive power is likewise clogged and unsatisfactory. To effect a cure, various movements of the body have been offered as devices for the removal

of the immediate cause of stammering; these movements equalize nervous tension by the distribution of force, and administer a tonic to the will and provide self-confidence to the sufferer. Habitual stammering may be attributed to laxness of the diaphragm and abdominal walls and faulty articulation in speaking. The actual shortcoming is more the effect of a sleeping will and vacillating energy than physiological weakness. We stammer when the body is weak and the will is strong; and stammer when the will is weak and the body is strong. We usually talk poorly when both body and will are weak, and talk well when both body and will are strong. We lack unity of action and symmetry of character. What we most need is harmony of action. The stammerer when laboring blindly and alone no sooner overcomes, in whole or in part, a certain phase of his impediment when it breaks out in another place. Such is true in case of temporary relief. While he may consider himself practically cured, the germ still remains, and his mother tongue (stammering), sows tares while in abstract thought, diligence sleeps. An educator might say his ego is unclean and he has not risen above a barbaric state. Unity of action and symmetry of power is lacking in integral form. It must be supplied in verity before we can be made whole.

Our cogent factors, intellect and will, must not escape the criticism they deserve. I do not believe that the possessor of a concise and logical brain and a constant will, ever was a confirmed stammerer. You arouse a stammerer, he, like others, will become erect and strike with precision in words equally as in deeds. He then thinks in words and in a direct line to the end. He then rises above his mean estate, and mind and body are united. If he is not equal to the occasion and not in part master, he wavers; and for him to falter, means for him to fail. The advice given by Lady Macbeth to her liege lord, I fear, will avail us but little. After arousing one's will when he speaks, "to the sticking point," to know what one is going to say, and

how he is going to say it, while one is transacting business and grasping subtle problems, is asking more of us than a large majority of us are able to carry. In my opinion, it is far better to concentrate the thought and forget the weakness. To rely upon the temporary strengthening of the will at call to drive away the hallucinations of weakness and kindred evils, proves not very satisfactory. It alone is not sufficient, and will not always retain its charm. The etherial chord of egotism will most surely, sooner or later, succumb to conditions. If we rise above it, all well and good. Increased energy of thought, of word and deed, acts upon the vocal organs in an indirect and reflex manner only. The all-wise God provided that respiration should be increased or diminished as man's needs require. When the occasion demands the expenditure of physical and mental energy, he consumes oxygen in like proportion. He is either eloquent or uninteresting as occasion demands and the speaker is able to respond. If he has a message to impart to a multitude and he is strong, he rises to the occasion and the quantity of oxygen he consumes will furnish him corresponding lung capacity and material for sufficient volume of voice. Voice follows the brain *intuitively* and *responsively*, not *conjunctively*. In all our endeavors and research we must keep this fact in mind. The modulations of the voice in pitch, quality and color are the reflection of the speaker's inward soul. Likewise a stammerer must be taught strictly according to the law of voice, overcoming habit and disease in due time. If nervousness is the result of stammering, to remove the cause insures rapid advancement and perfect cure. The child stammerer is troubled with a nervous disorder, and there usually follows illness, great mental excitement and fright. We have now passed that stage, and, conditions being different, we must remove the effect. We have not fully acquired habits of concentrated thought and correct thinking. These are controlling tenets more important to the stammerer than to others not so afflicted. Our mental conceptions are both word pictures and realistic scenes. If



we think in words our conceptions will be clear and concise. If we indulge in incomplete pictures, confusion is sure to follow, and our vocabulary suffers in like proportion. The stammerer seldom, if ever, thinks wholly in words. It is said that he thinks faster than he can vocally execute. That many times is true, but oftener the thought is spread in mental landscape, and groups a sentence as one word. He may pass from one incomplete word and sentence to another, thereby not only allowing fragments of the column of devitalized air to escape him unvocalized, but by reason of such failure to properly articulate phonetic sounds and economize the escaping air column, large blocks escape. The successful speaker is wrapped in his subject completely. He loses his identity and forgets self. The subserviency of physical man to intellectual man is perfect and complete. With the stammerer such a condition seldom if ever exists. His soul never forgets that he is a stammerer and his sensitive nature is ever receptive to unfavorable condition. They may appear before him with or without conscious volition, whether transitory or lasting, they cannot be successfully ignored. The seeming incorrigibles are the mental stammerers. They stammer in their study, in their reveries and their dreams. Truly, "he that conquers himself is greater than he who has taken a city." The stammerer must first find self-control. He must succeed in separating himself from a bondage more painful than slavery. Think, speak and act according to the rules prescribed by nature, the divine law.

The stammerer presents a unique psychological problem. His forebodings of inability to speak and horror of certain words, and the rise and fall of his "ego" are apparent as time, place and circumstances present difficulties to his weird brain. In moments of abstraction or during concrete thought, he vocalizes with reasonable freedom. His inability to successfully repeat a word when once properly spoken, and the recurring terror of failure, is a phenomenon that may be attributed to and designated as psychic mechanics. It is an unseen power, cannot be circum-

scribed, and for no better name we call it *force*. Between man and man we call it animal magnetism. Man as an entity is either positive or negative. With the stammerer, he is a negative one. He needs his positive psychical complement. The Hindo yogis divide nature into *force* and *substance*. We call it mind and matter. Too often mind is not the servant of man as it should be. The power which impresses man is the power in man to control other men. When the mind is the servant of man and he favorably impresses men, the finer pulsations of the nerve currents play upon one another, and the various attributes of the body will come to him in form and power. This study has been called "Suggestive Therapeutics." It has not yet advanced to the plane of a science. The weakness of the stammerer is self-accusative. Lytton says, "Shame consists not in the loss of other men's respect, but our own." He in a measure contends with that self-accuser. Intellect influences unconsciously as well as through the intervention of intent. Sympathy seldom produces good results, in that the encouraging element is wanting.

The stammerer has not only his own weakness to combat, but the reductive magnetic force of a superior individuality. When he meets a stranger among strangers, he has not his own evil genius to remind him of his impediment. Even should it be discovered, it does not carry with it such humiliation. Aside from habit, stammering is much the result of the absence of self-confidence. The difficulty may or may not exist without cause. Let it suffice by saying that the magnetic influence which enabled Wendell Phillips to thrill an audience, and Choate to hypnotize a jury, is not to be commanded by us. They drew their power and inspiration from the audience. This reciprocative telepathy must be reclaimed for us. A reasonable share of it is our birthright. It is not spiritualism. It is not hypnotism. It is metaphysics, pure and simple. It is the law supporting self-respect, the mainspring guiding mutual love and confidence, and the essence of Christian devotion. Will not some one solve the problem?

Self-inspection reveals to us many griefs and shortcomings. Possibly the divine meant us when he said, "We may have been letting weeds grow in our hearts." Another said, "In growth there is no flying, and the ladder can only be reached step by step." Weeds have grown in our hearts and we have nurtured them through ignorance. To eradicate them and reach the top of the ladder we must now gain and advance step by step. In advancing we must trust something; let it be ourselves. If you think you are disappointed with yourself, look deeper. Truth stands ready for us to receive it. Listen to the voice that speaks where there are none to speak. How can you hear unless you open your soul? Face your soul; admit you have not reached the equilibrium. This is true with us. We have not looked deep enough; nor have we reached the equilibrium. We have not listened; nor have we opened our souls. We are disappointed with ourselves. We are, as a rule, isolated beings and cannot hear because there are none qualified to speak; and cannot open our souls because our hearts are empty and seared.

Richard Mansfield, writing in *Collier's Weekly*, likens the somber shadow of an audience to a hungry monster coming nightly to be fed. He also speaks of the influence the audience has upon the actor when he once enters upon the stage and the vital importance of its approval or disapproval.

He says: "Ah, I wonder if the monster has a heart? Is there a great heart in this great audience? Does it love me? Or is it only there to be fed? And when I am worn out and drop down, and it goes out hungry to drag itself elsewhere for its nightly food, I wonder whether it will bestow a passing thought upon the little man in the limelight that threw his life to it every night, every night across the footlights to be shredded, torn and chewed, swallowed and digested. Does it know what I am suffering, as I stand there before the first few words find their way through the dry and choking passage of my throat? Do you know what it is for me to face that

monster? I wonder is it kind tonight and in a good humor, or will it quarrel with what I can give it? It is always the best I have. 'What an epicurian monster.' So many heads with so many ways of thinking. How often in my closet, before my glass, have I thrilled my very reflection with the vehemence and power of my delivery, to cast it at night into the stony and unmoved faces of an unfriendly monster. How often has an audience arisen to roar its approval and delight at a certain passage which another monster has received in apathetic silence."

Profitable thought may be deduced from the statements of this tragedian. He faces no greater monster than the stammerer faces, when he (the stammerer) faces his long list of failures to speak under similar conditions, and now must risk another encounter. The effect produced upon the audience is always in evidence; but the effect of the audience upon the actor is seldom, if ever taken into consideration. Nor do we comprehend why the stammerer can speak so much better at times, under certain conditions, than under others. In like manner the effect produced by the world at large upon the stammerer is little taken into consideration and known by the persons who compose it. Neither are they at fault. Human life is a contest for existence. Such existence may be very primitive or abound in regal splendor.

Why should we expect them to stop long enough to seriously consider that which we ourselves confess they cannot intelligently comprehend, let alone successfully mitigate. This influence remains and must be fairly and philosophically met. Never accuse the world of being unkind; it is more just and kind to us than we are to ourselves. Sympathy is always bestowed in unbounded measure. It is not an uncommon thing for such sympathy to cause more pain than a shaft thrust by the imitator. How many of my readers have witnessed pain depicted upon the face of one who is compelled to listen until his errand is made known. Taunting should be harmless, save



to children, for such, thoughtless themselves, may fall by the wayside and become stammerers of greater degree. None but the child stammerer should be aggrieved at the mimicry of others. Pain, other than physical, consists in not being able to talk and do as others do, and the knowledge that the coveted prizes of the world are beyond our reach. No pain or suffering should fall upon an adult stammerer other than that of physical pain, the result of unnatural effort to speak, inability to be more useful to self and congenial to others, the exception. Possibly I may add the knowledge that our misfortune may cause others to have pity and be sad. Either taken alone is great enough. If one must be a stammerer, he should accept the situation with cheerfulness, suffer as little as possible and work and hope for the time to come when he will overcome it. Such can and has been done by others.

Do you will strong enough to do it? But few can without competent aid.

A word might be said about the position to which a stammerer might aspire: to all the good things of this earth and the hope of all there is beyond.

He is compelled to choose the substantial blessings of life. The pleasures of the drawing-room are not his. A leader in society in the usual accepted term, he must not hope to be. To be admired for his personal presence and much speaking, he must not contemplate. Do not gather the impression that the stammerer should not enter society. Social life should be encouraged and cultivated. To do so will alleviate seeming embarrassment and make a cure less difficult and more probable. There are things he cannot do and certain duties he owes to himself and to his friends. He must avail himself of what tact and talent he has to offer and to please and no more. There are no reasons why a stammerer should not be the best informed man in his community. It should enable him to know men better and consequently be wiser and happier. He will profit quite as well observing his

more fortunate brother flitting his time and usefulness away. Countless pages of printed matter and numberless volumes of good books are his, inviting his perusal. Will he improve or will he pine away and exhaust himself in execration and grief? Many brighter minds than ours have borne no fruit because fortune has enabled the possessors to spend life in gaiety and pleasure. Many noted men in history, science and letters, though stammerers, have become famous because of their willingness to avail themselves of opportunity and the superior talents they possessed. The stammerer may be an ornament of society, because of his fund of stored knowledge and substantial character and standing as a citizen. It is folly to feel injured because others laugh at some of our expressions, which oftentimes upon reflection we know were amusing. Why aggrieved because some callow and brainless youth with silver tongue is better received than he deserves? We must not expect too much of others. Nor do we want sympathy. It is substantial encouragement we need. First, to try to be honest with self, then the clouds of depression will be more easily removed and the victory more than half won. I have tasted all the bitterness common to all. Try my advice and see if life will not be more bearable and victory seem nearer.

The unseen force which plays so important a part in the successes of the great actor and its counted influence is beyond our control, and cannot be successfully contemplated as a science. We speak of some men as magnetic and others as cold and unresponsive. The stammerer is a very sensitive individual. He receives sensations quickly and suffers, or he is happy in equal intensive degree. Despite the fact that others more competent than I to judge, declare that the stammerer talks better to strangers than to friends, because he wishes to hide his defect, I make claim that oftener it is the result of the absence of suggestion that either is a stammerer. Whether the stammerer wishes the stranger's good will, plays an important part toward his composure. If he forgets he is a

stammerer and the stranger is not expecting him to stammer, that depressive influence is wanting. If he stammers, then he is a stammerer by force of habit more than by the result of disease. The author of "*The Practical Treatment of Stammering*" tells how the presence of a farther caused a stammerer to tremble and speak with great difficulty, and how when alone with the child, separated from the father, he led it into the realms of forgetfulness and fed it upon positive and progressive sympathy, instead of negative mental telepathy. Can the erstwhile educator learn to know the stammering child's needs? If so, can we claim the child's patience? It is doubtful with our present enlightenment if we would be better than they were we placed in their position.

Heretofore we have heard much about our souls forgetting that we are stammerers, and could we so forget, we would never stammer again, and of the stammerer speaking fluently when he is master of the situation. What do we mean by it? I understand by it that these stammerers have arrived at such an age that the curse has become a disease and that the nervous system is extremely sensitive to physiological impressions. They have also advanced to a stage that under favorable conditions they do not stammer to any considerable degree. They have increased their muscular vigor until it and their nervous impulses will nearly counterpoise.

To be master of the situation means to be in a position where there are no reductive influences to affect vitality, equilibrium and composure. If one stammers before a stranger, of whose good opinion he is not particularly desirous, then he stammers principally from habit, his mother tongue pure and simple, poor articulation and without use of sufficient mental resolution. A moderate stammerer looks down upon a more unfortunate one with scrutiny and is conscious of superior strength. His sympathy goes out to him while the hopeless brother is doubly reminded of his thralldom. The one is part master of self while the other has nothing but reductive

influences to drive his spiritual thermometer lower and lower.

Exclusive of the nervous complications caused by stammering, the discussion may be resolved into an investigation of the application of the will, the quantity and quality of energy voluntarily and habitually expended, and how much of the difficulty can be attributed to imperfect articulation through habit. Manners, speech, presence and character are largely confirmed by habit. Under competent instruction and surrounding influences, all these attributes may be materially changed for better or for worse. With the stammerer he has not the competent instructor nor the competent and vigilant critic to be ever present to warn and guide him.

One of the most serious conditions to be met and overcome is fear of stammering. In this particular the stammerer is his own evil genius. It is an idiosyncrasy always present with him and most difficult to dissipate. Were I to attempt to discuss it I would first make claim that such fear may be present in conscious active form or instinctive in its reductive presence. It is a morbid reflex action which is present with the stammerer. Determination, anger, joy and grief may momentarily dispel it, only to return when conditions relapse to the normal temperament.

Evidently the stammerer's greatest cogent difficulty is in the direction of the nervous forces of the body and stimulation to action of the organs used in producing articulate speech; I might add, the formulation of harmony in action when sufficient stimulation is once produced. The accumulated force within the body is an entity in form and should be a unit in utility. Theoretically and practically the mental energy of the will as propelled by the stammerer over such nervous force is unsteady and not continuous in fervor. In like manner such force is inequally distributed, likewise wavering and irregular.

While the proposition is largely clothed in theory and



will bear extended research and discussion, stammering may be due to a weakness in that portion of the brain which governs and presides over the faculty of speech. If true, it is of such a kind that may be overcome by strengthening it through the culture of its attributes. It is more probable that the portion of the brain which controls the motions requisite for the production of speech, has become morbidly irritable and susceptible to impressions from without and is apt to issue more nervous impulse than is proportionate to the stimulus applied to the parts and *vice versa*. And by reason of this irritability, the brain and the organs and parts used collectively and conjunctively in producing articulate speech are thrown into disorder and disunion of action.

So delicately responsive are the receiving vesicles that a mere mental desire to speak may cause the respiratory and vocal organs to act spasmodically. This is the usual condition of the stammerer when he contemplates articulate speech. His fear and self-considered inferiority is always present with him. It can be better illustrated by quoting the experience of another, who says: "I have often intercourse with men for whom I feel so much respect, that it is almost impossible for me to speak to them when I appear before them." This is true with all men, but more especially with the stammerer. This condition exists until the conversation becomes general or animated when the stammerer's individuality is lost in the mazes. He has been led to momentarily forget that which the moment before, his five senses would not allow him to drive away. Upon such occasions as this the desire to speak is not wanting, he may forget that he is a stammerer until pain and failure to speak make known to him that he has failed.

We are exhorted that "eternal vigilance is the price of liberty." It is true, yet to successfully apply it requires a master. Vigilance corrects only defects of habit. Thus in so far as stammering is a habit, vigilance is sufficient. But in so far as there is a disease it alone is not absolute.

The theory of opposite mental emotions is advanced. This is true when any one is confused, but cannot be accepted in full as applied to the real stammerer. His contending emotions are, I must speak; can I without stammering? It is a new proposition to me. I prefer to attribute it to excessive emotion conjoined with failure to concentrate thought. Either the individual does not think in words or does not do so logically and with firmness. What we are seeking is to command a strong and undivided mental effort; a strong, concise and perfect mental conception supported by composure and sufficient physical energy. It is vocal muscular energy we need, not excessive mental impulse.

Without fear of successful contradiction, it may be stated, stammering is caused by irregularity in the nervous action of the parts which combine to produce speech. This invariably is not due to a malformation of the parts but to incoördination of muscular movements of the organs used to produce articulate speech. This misdirection of vital force is universally conceded. In the absence of no better terms of vocabulary, we designate the difficulty as due to the improper use of the will, and the insufficient diffusion of physical energy to the contiguous parts. Whether it is due to the unequal distribution of force or neuro-congestion of particular viceras, science has made no decisive demonstration. We do know that incoördination of the organs employed in producing articulate speech is present with us and that the pneumogastric nerve, the governor of respiration, is not without fault. Evidently stammering is due both to excessive as well as to deficient application of physical energy. Either will cause inability to generate proper physical action sufficiently accurate to enable the individual to speak with reasonable fluency and correctness. In this province, respiration must not be overlooked. It is lung capacity which supplies the system with oxygen, and oxygen is life and energy itself. The arrest of respiration always accompanies stammering and may be said to be the original mechanical agency

to be mastered, for the reason that when stammering occurs, correct breathing is impossible. The paralyzing and depressive nervous sensations which are the precursors of the stammerer's "boge," or fear, are principally due to the denial of sufficient oxygen to the brain. More than that, the body is deprived of its power.

Stammering is recognized to be largely a habit. In ordinary conversation with friends, stammering is a habit in the same degree that any other disagreeable mannerism in speaking is a habit. The stammerer at such times fails to exercise his will to the extent that the vocal organs are properly placed and kept in motion. His thought conceptions are usually incomplete. It is also largely due to a failure to articulate and economize the column of air he should have at his disposal. If this were the only shortcoming the stammerer had, his cure would soon be perfected. Correct habits of articulation can be easily acquired. Stammering is inseparable from the mind, and permeates the nerves and muscular tissue. To effect a cure of stammering, correct speaking and thinking must be continued until incorrect habits of speaking and thinking are overcome. They will only be correct habits when the weakened parts, mental and physical, are made strong and successfully do their part, and when the voice instinctively and without prompting, accompanies the desire and impulse to speak.

Stammering, as we contemplate and discuss it, is something more than a habit. It is accompanied by nervous complications. The real cause and difficulty is "irregularity in the nervous action of the parts which combine to produce speech." It consists in irregular vocal impulses sent to the organs of speech and usually is the result of bad mental conception and ill arrangement of thought. Fear of stammering and physical weakness of the different coördinating parts plays an important influence upon the means to be employed to effect relief. This absence of coöperation among the active faculties "gives rise to a plurality instead of a unity of nervous purpose," and

consequently irregular movement, instead of a unity of muscular combinations, follows. Plurality of nervous purpose must not be confounded with plurality of mental purpose. The latter afflicts all persons, when confused, and is not an attribute of the stammerer alone. Unity of emotive purpose and unity of muscular action is controlled and influenced by patent force or electricity, which is present in all animate bodies. The emotive purpose is volition to speak and the nervous purpose is the power or servant that executes the order. I beg leave to advance the proposition that such force is an entity and its efficacy depends upon the regularity of its circuit the same as that of the blood. I see no reason why that such flow may not, upon derangement, be unequally distributed and put in action accordingly.

We read about certain emotions being caused by exciting the brain and directing a powerful nervous influx upon the organs of speech which frees the stammerer of his infirmity for a time. Also we read about a nervous influx upon the movements of the vocal muscles producing too much nervous influence on the muscles which are employed in speaking, resulting in the improper control of such muscles. To my mind, such truths teach that whatever diminishes the nervous flow to some other part of the body, and relieves or weakens such part, with the stammerer diminishes stammering in like proportion. Do not confuse this rule with habitual stammering in common conversation. In such cases the other extreme is reached, namely, a sleeping will and deficient energy. The treatment in such cases must be chosen which applies to the individual.

One of the systems of cure for stammering that I have become familiar with, (not the *Lewis* method,) seeks to keep the larynx open and the vocal cords tense by keeping the epiglottis erect. It is a correct principle, but does not go far enough. The closure of the air passage is the result of an unsuccessful desire or attempt to vocalize. It is a child of the cause and not the primary



cause itself. When you make the coöperating organs strong and perfect in movement, the epiglottis will seek its correct position. All the different systems resolve themselves into methods whereby the nervous force of the body is equalized and physical correctness and mental equipoise are temporarily maintained. If sustained for a sufficient length of time, the weakened parts become strong, correct speaking will become a habit in the same measure and force that pleasant mannerisms and eloquence become habitual. Character and vigor is infused and rejuvenated.

Various devices are used. One divides the attention in order to cause deliberation and composure. Another seeks dividing the thought, in order that nervous tension may be reduced, premising the good results upon the theory that the mind is too intently fixed upon one thing, and the one effort, claiming that to divide the mind's attention will cause deliberation and composure. While still another teaches methods to promote rhythm in the utterance of the syllables in a sentence. They are all correct in this particular that they have arrested the throwing out of too much nervous influence to the muscles which are employed in speaking, and are cultivating mental deliberation in an available way. The exercises, if perfectly performed, will assist in equalizing the nervous forces of the body and promote proper vocalization. Another element must not be overlooked, that confidence in self has been infused by these methods and sufficient vital stimulation has been generated within the individual to insure reasonable vocalization. These, my conclusions, clearly prove to me that relief from stammering obtained by the various methods used, that confidence in self and methods, promotes constitutional energy, and a determination of purpose, requisite to support a composed purpose; and that the described movements of the body assist in relaxing the distraught members of the vocal propaganda and establish a perfect and complete neuro-circulation. All of the positive advices are successful, because of the confi-

dence they give the student in his ability to speak. They increase clear thinking and give a united and aggressive physical energy. Were these principles taught, continued for a sufficient length of time, until the injured parts are strengthened and perfect speech a habit, all would be well.

Instead of dividing our thoughts and attention we should draw them closer together. Acquire the equalization of our vital force through correct and natural methods. Then when we reclaim composure, deliberation, clear thinking and correct speaking, our relief will be lasting. Is it possible to succeed alone? We are children to be taught, and there are none present competent to suggest when we are laboring in the wrong. Nor is there anyone present to warn us when we obviously relapse. We are seeking a state where stammering will exist only as a reminiscence and when we shall speak correctly by impulse alone.

## THE CURE OF STAMMERING

As generally considered, stammering embraces all forms of defective speech, and may be defined as an inability to produce sound at will. Language is distinctly a result of voluntary mental and muscular action. With non-stammerers, however, the action of the mind, nerves, muscles and vocal organs, are so nearly simultaneous that in the conduct of ordinary conversation the speaker is wholly insensible of mental or muscular effort. The stammerer, on the contrary, produces speech by the exercising of great mental and physical exertion only. This effort is put forth in various directions; for example, in the selection of words, substituting synonymous words easier of articulation for those more difficult, or, perhaps, impossible of utterance—often consisting of the mental formation of entire sentences before a sound is even attempted—and always takes place in actual articulation.

## HABIT—DISEASE

Whether or not stammering and stuttering are really diseases or habits merely, I am not qualified to state, but I do know that defective speech is not only seldom due to organic defect in the vocal organs, but, as a rule, begins in imitation, unconscious or otherwise, which rapidly develops into habit. All of us know that in habit there is a point beyond which that habit cannot extend, and, I submit, if at this stage its practice seriously affects the health, strength and vitality, and at the same time is beyond the control of the sufferer, it may very properly and certainly be termed a disease; and as stammerers never stutter, but stutterers are predisposed to and occasionally do become stammerers, it is clear that stammering may include both defects and is that final stage of habit. Distinctly defined, stammering is an inability to produce desired sound at will, and stuttering the repetition of more sounds of the same kind than are needed. I choose to term stammering, the worse stage, a disease; and stuttering, a habit.

## CLASSES OF STAMMERERS

Persons who suffer from defective speech may be divided into three classes: 1. Those who stammer constantly, regardless of circumstances and surroundings. 2. Those, who, regardless of circumstances and surroundings, sometimes stammer and sometimes do not. 3. Those whose stammering is greatly influenced by circumstances and surroundings. With those of the first class, stammering is nothing more or less than a disease, caused, probably, by excessive and long indulged stuttering. It is, however, none the less a disease, and, like most diseases, is subject to cure under certain conditions. Observation leads me to believe that class 2 is more frequently composed of stutterers of the severe type, upon whom is becoming rapidly fixed a habit which, unless checked, must end in the dis-

ease of stammering. In the 3rd class may be placed those who stutter much or little because of the presence or absence of certain persons, or because the surroundings are unusual and exceptional. These are the nervous, sensitive, retiring people who ordinarily lack the confidence requisite to self-assertion.

#### FORMER TREATMENT FOR CURE

Formerly, treatment for the cure of stammering consisted in the placing of rollers under the tongue, the cutting out of the tonsils, the application of electricity, and sometimes extended to actual mutilation of the tongue and other organs. Unless aimed at either organic affection or actual malformation of the organs of speech, which is rarely the case, it is difficult to understand why these modes of treatment should have been expected to effect a cure, and I imagine the treatment was largely experimental and the percentage of cures very small. Later, we find the theory that the sole seat of defective speech is in the glottis. This can be true only as to sounds of the throat, commonly termed vowel sounds. Another theory was that the difficulty was due to spasmodic action of the muscles concerned in the production of sound. This, too, is but partly true, for the reasons: first, that sound does not constitute speech; second, that but one set of the muscles used in articulation are necessary to the production of sound, those of the glottis. Then, too, spasmodic muscular action being entirely due to nervous disorder, the theory does not extend to the real seat of the difficulty. The peculiarity of old methods of treatment lies in the fact that in their endeavor to remedy what they considered to be the result of malformation, the so-called "professors" so mutilated the organs of speech and by artificial means so changed their natural position that perfect speech must have become thereafter impossible.



## IMPEDIMENTS OF SPEECH

Impediments of speech are vowel, labial and lingual; i. e., the immediate manifestation of the difficulty may be in the throat, in the lips, or in the tongue. Vowel stammering is due to a closing of the glottis, which, being the entrance to the larynx, the upper part of the windpipe, prevents the voice or breath from escaping from the lungs. This impediment, which constitutes stammering proper, inability to produce sound, may occur in the enunciation of all words or syllables which commence with letters the formation of which takes place in the throat. Labial impediment appears when attempt is made to enunciate words and syllables commencing with letters which require a closing of the lips; for example *b*, *m*, *p* and *sp*. The difficulty is experienced because the lips either remain closed longer than is necessary to form the word, or open and close rapidly, producing the same sound over and over. Lingual impediment appears in the attempted pronunciation of words or syllables beginning with letters formed by pressing with the tongue against the roots of the upper teeth, as in *d*, *l*, *n*, *s* and *t*, spasmodic action of the tongue either preventing voice and breath from escaping or causing the sounds to be rapidly repeated.

## RELATION OF RESPIRATION TO SPEECH.

Sound cannot be produced without air, nor air obtained without respiration, that alternate expansion and contraction of the chest, which is effected by the inspiration and expiration of air through the larynx and windpipe into and out of the lungs. The chest having a constitutional tendency to collapse, its expansion in inspiration is due to muscular action. Because of this tendency of the chest to recoil, no muscular power is exerted in ordinary expiration (breathing), but in the voluntary expiratory efforts of speaking, singing, etc., this recoil power is insufficient to

generate the stronger power or current of air necessary to produce sound, and the diaphragm is called into play; consequently, respiration must, to some extent, be under the control of the will. In ordinary respiration the vocal cords are so adjusted by their muscles that the glottis is widely open, widening in inspiration and narrowing in expiration. In vocalization the vocal cords approximate and become parallel, their tension increasing in high notes and decreasing in low ones, the glottis correspondingly widening or narrowing to facilitate the production of the tone. The glottis, which under ordinary conditions is a triangular fissure between them, can be entirely closed by approximation of the vocal cords.

#### THE PRODUCTION OF SOUND

Sound is produced by the passing of columns of expired air through the glottis and over the edges of the inferior vocal cords. Sound, however, is but vocalization, and not speech—young babies occasionally produce sound, but their best friend would hesitate before terming that sound speech; while there may be sound without speech, there cannot be speech without sound.

#### SPEECH

Speech is articulate sound. Sound is moulded into speech by the glottis, the tongue, and the lips; the vocal cords, beyond producing sound, have nothing to do with speech, unless it be when by too great approximation they entirely close the glottis and so prevent both articulation and sound. Musical tones, through various alterations in position and degree of tension of the vocal cords effected by means of the laryngeal muscles, are formed in the larynx, but words used in singing are framed by the same organs and in the same manner as in speaking. Articulate sound, or speech, consists of vowels and consonants.

Vowels are generated by the larynx; consonants are formed by interruptions of the currents of air in the air passages above the larynx. In utterance, the sounds of some consonants *h*, *f*, *s* and *r*, are capable of prolongation so long as constant expiration and a particular position of the mouth are maintained. The sounds of others *b*, *d*, hard *g*, and *p* are incapable of this prolongation because of sudden change in the conformation of the mouth. Similar differences as to time exist also in sounds.

#### CAUSES OF IMPEDIMENT IN SPEECH

Defective speech is caused chiefly by want of an unobstructed passage for the breath from the lungs, and so far as speech is concerned, respiration is to a large extent voluntary. In perfect speech the actions of the essential organs are controlled by voluntary muscular action. In defective speech muscular action is more or less spasmodic, and we find involuntary action where the control of the will should be absolute. Spasmodic action being an unnatural, involuntary, irregular, contractive action of muscular parts, we find that defective speech is largely due to this cause and is due also to a defect in respiration.

In effect there is a great difference between faulty action of the glottis and faulty action of the tongue and lips, for if there be but temporary closure of the former, not only speech but also sound cannot be produced, while the latter concerns entirely the articulation and pronunciation of words and syllables. Where because of disease it has been necessary to remove the tongue, speech, while it became imperfect, was not lost except as to those letters formed by the action of the tongue—probably the same is also true as to the lips. Resulting from convulsive action of the muscles, impediments in speech must necessarily include a disordered action of those certain nervous centers whose principal functions are those of volition, motor and reflex action, and particularly the center that sends out impulses during inspiration which

causes respiratory movements of the muscles of the nostril, jaws, glottis, the muscles which produce a raising of the ribs and of the diaphragm, and, during expiration, certain other muscles. It is also well established that at certain stages nervous disorders seriously affect the mind. To sum up, we find that the true causes of defective speech should be sought in the brain, the nerves, the muscles, and occasionally in the organs of speech themselves. Except in almost isolated cases, however, the faulty action of these muscles, is due almost wholly to habit. This is true also even in so-called cases due to hereditary transmission, for as improper action itself cannot be transmitted, that which really is inherited can be but a tendency to stammer, regardless of liability of contraction through imitation or association.

#### EFFECT OF DEFECTIVE SPEECH

As the nerves affect speech, so defective speech, by keeping one in a state of constant excitement and worry, affects the nerves and tends to increase the malady not only in frequency, but also in severity. Observe the stammerer when speaking and afterward. You will find the rapid breathing and flushed face indicative of great mental exertion, great physical exertion and increased action of the heart. Then, too, the complaint necessarily is a cause for unhappiness and self-loathing to the sufferer and for curiosity and, sometimes, amusement to his fellow-men. Think you this state of affairs can fail to have its effect upon the brain and, finally, upon the health? The surprise lies in the fact that the stammerer so long and so manfully keeps up the fight. Undoubtedly, too, the habit greatly handicaps one in struggling for success.

In addition to this, the very knowledge of his infirmity makes the sufferer not only hesitate to push himself and his interests and causes him to avoid the society of those with whom it is to his advantage to associate, but actually



deprives him of the use of his own knowledge for his own benefit. His stammering not only incalculably affects the stammerer himself, but is the cause of injury to others, endangering the speaking facilities of every young person with whom he may come in contact; for whatever caution we may use, we cannot but to some degree absorb, by involuntary imitation or otherwise, the habits of those with whom we associate. To those who succeed us, the injury may extend in the form of a tendency toward the habit; which tendency becomes the more apt to be developed by the influence surrounding the child in its infancy when it must needs learn from those constantly present—peculiarities far less liable to imitation are observable in whole families. May it not, indeed, be criminal to deliberately transmit to those innocents a tendency toward that which will subject them in childhood, to the ridicule and jests of their playmates and to the impatience of teachers; in youth to personal mortification, discouragement and disgust. Stammering in manhood, tends to handicap the sufferer in his fight against the world, to deprive him of the pleasures of social life, to subject him to the pity and commiseration of his friends, and finally may be instrumental in the misfortune of still another innocent.

#### CURE

If the organs of speech can sometimes produce perfect articulation, as is the case with stammerers, what better evidence is needed to prove that stammering is a curable defect? And if in this scientific age disease in its worst form yields to treatment, why not stammering? Nothing worth having, however, is obtainable without the expenditure of a certain amount of time, care, patience and perseverance. This is equally true of the cure of stammering. A habit of years cannot be at once cast aside, but yield it must to proper, patient, systematic treatment. The patient should at once drop all other habits the practice of

which injuriously affects the brain, the heart, the nerves, or respiration—because such habits tend to increase spasmodic muscular action. The patient should be drilled in distinct articulation and slow speech and in respiration until proper respiration and articulation become to some degree natural. The practice of abnormal movement of the jaws while speaking will strengthen those muscles of the lips necessary to the articulation of labial sounds. Drill in articulation should be almost entirely confined to consonant sounds which require complex movements of the muscles concerned in proper enunciation. Vowel sounds being formed between the vocal cords and issuing therefrom are more easily and naturally produced. All drill should take place under an instructor, for the reason that it will be more regular and systematic; not only this, but an instructor can more readily perceive defective and careless practice, dropping valuable hints for the correction of the former and drawing attention to the latter.

Physical exercise, preferably in the open air, should be regularly taken; for the reason that healthful action of the muscles promotes health and the impediment is apt to alternate in direct ratio with one's physical condition. Excessive and violent exercise should be avoided, because such increases heart action, and respiration ordinarily corresponds to similar variations in the pulsations of the heart. Sufficient sleep should be regularly taken. Nearly all of us sleep too little, yet this is the season of vital recuperation, and repairs go on which are absolutely essential to health. The stammerer should cultivate and preserve a cheerful condition of mind, for unpleasant thoughts irritate and disturb the harmonious circulation of the nervous forces and prey upon the nervous system, while cheerfulness and good temper promote quiet, healthful nervous action.

The patient also should seek to acquire self-confidence, for while the lack of it cannot alone cause impediment, yet when the stammerer is convinced that he can enunciate as distinctly as other people, he will more rapidly over-

come the defect by the effects and enthusiastic exertions which renewed confidence begets.

Stammering is one of the most obstinate habits with which man has to contend, and it is preposterous to suppose that it can be thrown off with the same facility with which one might forever discontinue the use of coffee. More than this, there is a certain amount of work that must be performed by the pupil himself, which, unless done, no tutor on earth could successfully serve him—one visits one's doctor, but to what would it amount if we failed to follow his advice and to take regularly such medicine as may have been prescribed? If unwilling to faithfully yourself perform your portion of the work, you had better not make the effort to be cured.

### ADVICE FOR SELF-CURE.

I have been a stammerer from my childhood. From my earliest recollection, until I was fifty years old, the great problem of life was: Why can I always talk when I have no one to talk to, and the faculty fail me when there is a necessity for using it?

Physiologists and physicians once speculated much upon the subject, but physiology seems to have given up in despair. Myself, an educated physician, engaged in the practice of medicine, some years of that time occupying a position which brought me into familiar association with men who stood high in the profession, I have never received a suggestion regarding stammering from a physician that was of the slightest use to me; I never met with a physician who professed to know very much about the nature of the difficulty.

The treatment has been left to unprofessional men, from whom I have derived many valuable suggestions

that greatly relieved, although they did not remove, the difficulty. I learned to read and converse fluently in the domestic circle, but in public speaking was always liable to be exposed to terrible mortification.

Groping my way alone and in the dark, late in life I discovered two or three physiological principles which I think satisfactorily explain the difficulty, and point to a mode of treatment easily comprehended and carried into effect. My observation has not been very extensive, but I think I am justified in saying that stammering can be cured as certainly and expeditiously as a broken limb.

If the parent understood the nature of the difficulty child stammering could always be nipped in the bud.

These, then, are the principles by which we propose to explain the cause of stammering, and to point out a rational method of cure:

1. The muscular motions employed in articulate sound are instinctive, involuntary, analogous to the muscular motions in laughing and crying. The will can modify, but can originate them only indirectly. Stammering is caused by the want of energy in that department of the nervous system which produces these muscular motions, sometimes from imperfect development, more frequently from impaired health, or from morbid sensibilities.

2. The air in producing sound is expelled from the lungs in a different manner than in breathing. In ordinary expiration the diaphragm relaxes, and, by the action of the abdominal muscles, is forced up into the lower part of the chest.

In the emission of sound the current of air is kept up by the diaphragm contracting upon the elastic extremities, and thus by diminishing the cavity of the chest, expels the air from the lungs as completely as it can be done by its relaxation as in ordinary respiration.

This is the normal mode of speaking. Persons may speak with the diaphragm relaxed; some seem to do so habitually, but the voice is feeble and the effort is very laborious and tiresome. All clear, forcible and far-reach-



ing sound is made with the diaphragm energetically contracted. Elocutionists and professional singers speak of chest sounds and sounds that proceed from the throat. To the ear of the physiologist, the distinction appears ridiculous.

The artist, however, understands perfectly that his success depends upon the power to make chest sounds. The difference between them arises from the more energetic or the more languid action of the diaphragm. One of the great objects of the elocutionist and the singer is to train this muscle to energetic and persistent action.

In all the cases of stammering that I have examined for twenty years, its action has been very languid, and the great difficulty in effecting a cure, so far as it has fallen under my observation, consists in the want of power to control its action and change the action of breathing to that of speaking. When the health is vigorous and the spirits are elastic, this can sometimes, not often, be done by force of the will. When the health is feeble and the spirits are depressed, the will cannot control its action. For a very obvious reason, nature has provided that the diaphragm acts in concert with every motion of the body or of the limbs. We cannot change the position of the body, nor raise the hand to the head, but the diaphragm springs into action and assumes the position which is necessary for the production of sound, and will not relax its tension while the body or the arm is kept in vigorous exercise.

It is strange that a principle, the necessity of which is so obvious, should have so entirely escaped the inquisitive eyes of physiology. Men could not take any active exercise without fatal injury to the abdominal organs if they were not supported by the firm pressure of the diaphragm and abdominal muscles. In running, leaping, or hard riding, to relax the action of these muscles for a moment would be liable to result in fatal injury. Thus we have a ready explanation of the instinct which prompts every

public speaker to keep the body and the arms in active motion.

It is certainly the work of instinct, and as certainly as every effect implies a cause, every instinct points to an end to be accomplished. The motion of the body, or of the arm, expands the chest, fills the lungs with air, and puts every muscle of the chest in the requisite position for effective speaking, and keeps it to its work without any voluntary effort, with far less fatigue, and much more effectively than it could be done by the utmost force of the will.

One or two other principles very familiar, but apt to be overlooked, might be mentioned.

When different sets of muscles are in the habit of acting together, if you put one in motion, the other will follow suit, and if one stops the other will either stop or become disordered in its action, just as when one horse balks, his mate will either balk or begin to caper.

Another principle which men are very slow to learn is, "bad habits cannot be cured by tapering off; nor can good habits be substituted in their place, while the old habit is kept by too continual repetition." Common sense would very naturally suggest the opinion that a form of disease which depends so much upon morbid sensibilities is not likely to be cured by any process of secret training.

One of the great difficulties in the treatment is to get the nerve to look the individual with whom we are conversing very steadily in the face. When we can do this steadily and without embarrassment, the work is half accomplished. If these principles are true, they are certainly of sufficient interest in a mere scientific point of view, to be recognized as principles of science.

An educated physician ought to be able to explain the action of the most important muscles of the body in the exercise of the most important physical faculty which God has given to man.

Great teachers, of whom we have so many of whose eloquence and varied learning we so justly boast, ought

to be able to give to their pupils a satisfactory account of the physiological principles upon which orators have been trained for two thousand years.

They assume an additional importance if they serve to explain and to cure a frequent and very distressing form of disease.

That they are true, does not admit of a doubt. That they are not known in this enlightened age, would be wonderful, if everything did not combine to impress upon us that our age of boasted civilization is only entering the temple of science. Perhaps I attach to the subject an undue importance.

Stammering has been to me the great sorrow of a life of sorrow, infusing its bitterness into every pleasure and aggravating every other sorrow. If my parents had had the information which it is now in my power to impart, the difficulty at any period of my life might have been removed in a month, and, perhaps, I might have been saved from a life of perpetual disappointment, mortification and defeat.

The number of sufferers like myself is, probably, one in a thousand for the population of the whole country.

Of all that I meet, the countenance conveys to my mind the impression that they are very familiar with sorrow. I would not like to leave the world without giving to my fellow-sufferers the benefit of my own experience, and my life is so near its close that what I do, must be done quickly. The apathy of the public, discourages me. Men sympathize slowly with sorrow they have never experienced.

The cure of stammering does not, perhaps, come strictly within the province of the physician, still it might be supposed that professional pride would induce the physician to take an interest in a subject so closely connected with his professional studies and pursuits.

A name has great weight in introducing a new theory. Everybody will see the difficulty of proposing a cure for a disease which has been given up by many upon

principles not generally recognized; and that, too, by one whose knowledge of physiological science is very superficial. For this reason I am anxious, before publishing the mode of treatment, to have the principles upon which it is based recognized by men who have a professional reputation.

The investigation of the cause of stammering is attended with peculiar difficulty. The organs are concealed from view so that the spectator can know nothing about them. The sufferer is almost as much in the dark as the spectator, from the fact that we are unconscious of the action of the organs, and the apparatus by which we utter articulate sound is so complicated and the normal action of the whole is so dependent upon the normal action of every part, that it requires a knowledge of physiology more minute than our text books give, to trace the cause or to explain it.

Close observation of many cases of stammering enables us to decide upon some facts which may assist us in forming an idea of the nature of the difficulty, and lead us to a rational mode of cure. When we wish to utter sound, we inspire, and the muscles of respiration adjust themselves to control the current of air like the flexor and extensor muscles in the arm of the boxer adjust themselves, so as to keep the arm perfectly rigid and yet perfectly flexible. This action is instinctive, and we are so unconscious of it, that it seems not to have attracted the attention of physiologists. The vocal cords, which during ordinary breathing lie relaxed upon the sides of the trachea, affording a free passage for the air, suddenly aroused to action become very tense and elastic, and presenting a very narrow opening, through which the air is forced out in a rapid current, cause the sound which forms the basis of articulate speech. This action is instinctive also. The sounds of the lower animal, like the cries of infancy, are uttered and understood by instinct. Instinct prompts the child, like the mocking bird, to imitate the sounds it hears, until by years of



unconscious training it molds the sounds of infancy into articulate language.

Even so far as the actions of the organs of articulation are at first volitional, they become automatic, and take place without consciousness. Again, ordinary respiration is entirely inadequate to excited conversation or forcible declamation, and instinct prompts us in gesture to give fullness and energy of breathing, and control over the current of air for accent and emphasis. It will thus be seen that almost everything connected with speech is instinctive. It might almost be said to be educated and trained instinct. An orator or an actor may, indeed, change the whole character of his voice and expression, but he is never perfect, until by training, the changes become a second nature, and his thoughts and emotions express themselves without consciousness. Volition may be brought to bear upon the training, but volition is always a disturbing element in delivery.

It is evident that the organs of breathing, sound, and articulation must act together in perfect harmony, and that imperfect action on the part of one will derange the whole. At some period in early life—generally about the time the child is learning to combine words into sentences; sometimes under a high excitement later in life; sometimes when the vital energies are depressed by disease; an impulsive child, excited and anxious to speak, endeavors to effect utterance before the vocal cords are keyed up or the muscles of respiration are adjusted to control the current of air. Of course there is no sound. He continues the effort until the breath is exhausted, makes a hurried, convulsive inspiration, and repeats the effort. In his distress, various spasmodic, convulsive movements of the muscles of respiration, articulation and gesture result. By a few repetitions of this kind, sometimes by a single effort, the individual is spoiled for conversation for life. An impression appears to be made upon the mind analogous to those idiosyncrasies in which the painful impressions which are made upon the mind by some object are ever afterward

renewed by the sight of the object. For instance, a child having been terrified by a cat, can never afterward endure the sight of a cat. It is difficult to account for the phenomena of stammering except on some principle like this.

There is a close analogy between stammering in a child and balking in a horse, both in the commencement and in the result; and the comparison could be extended into minute details of abnormal action resulting from perverted instinct. The horseman has studied the instincts of the animal and is prepared to meet the case, either to prevent the habit from becoming confirmed or to correct it after it has been confirmed. Science has been less successful—very much, perhaps, from the fact that the training of children to talk is left very much to nature; and the idea that children can be trained to talk as dogs are trained for hunting and horses for the saddle, has scarcely entered the American mind. Consequently, when anything abnormal occurs, everybody is unprepared for it. The driver at once stops the horse, soothes him by caresses and kind words, adjusts the harness, lightens the load, gets everything in the most favorable position, and then, gently exciting him, seldom fails to induce him to pull. A similar process with the child would be as successful in preventing the habit from becoming fixed. After the habit is formed, of course there is more difficulty; still we have abundant resources for curing almost all cases of stammering. It may be laid down as a general principle that abnormal action which has become fixed by habit, may be unfixed and supplanted by normal action, by energetic and persevering training, provided the abnormal habits are not kept up by frequent repetitions.

I meet with a case of stammering. On inquiry, I find a state of facts something like the following: When he is perfectly calm and unexcited, and in good health and spirits, he talks with little or no difficulty. Under other circumstances he can scarcely articulate, the breathing becomes irregular and spasmodic, and he has no control over the current of air; the organs of articulation play

spasmodically, and the muscles which key up the vocal cords, refuse to act; certain emotions excite the organs of sound; others, such as fear and the embarrassment we feel in the presence of strangers, suppress them; certain bodily states affect him—loss of sleep, distress about the stomach or heart, anything which produces languor or depresses the vital energies; he speaks with much more ease when he gives his voice a slightly musical intonation; when he distinctly marks the rhythm, accent and emphasis, when he gives every vowel and consonant a full, distinct articulation. The difficulty of utterance shows itself principally on the accented syllables, and this is very much obviated by bracing up the muscles of the body and the breast and making a slight gesture upon every accented syllable; he can talk to himself, but he cannot talk to others; he can read a lesson while learning it, but he cannot recite it; he can sing, chant, and read in concert with a good reader. Very often the worst cases declaim fluently. They speak more easily when they give full play to the natural expression of emotion and sentiment. The utterance is affected very much by the manners of the persons with whom they are conversing. If he is a person of courteous, easy address, and a musical voice, they “catch his manner,” and talk with ease. With a person of arrogant manners and harsh voice they cannot talk at all.

We further remark that stammerers are generally sensitive and impulsive, that their feelings are intensely morbid, and that very often the temper, will and social affections are in part demoralized. These facts are very suggestive, and from them we infer that the mind and the organs of respiration, as well as the organs of sound and articulation, are deeply involved, and that no treatment can be successful which does not embrace the whole; that the habits of abnormal action can be broken up only by persistent training, and this on the condition that they are not kept alive by frequent repetitions; that the training is most likely to be successful which takes

him back to the circumstances under which he learned to talk, and brings him, by natural methods, to a natural mode of expression; that the success of the treatment will greatly depend upon the system of training, that no system can be a complete success until it results in fixed habits of spontaneous action; lastly, that the morbid sensibilities give him a just claim to sympathy, courtesy and kindness.

Some stammerers who have great firmness and self-control, can cure themselves. All are much better for a trainer, and to most of them it is a necessity. Supposing myself to be that trainer: 1. My first object is to gain the stammerer's confidence and make him feel perfectly at ease. I give him to understand that by training I mean earnest, persistent work; that with this he will certainly succeed, and that without this he will certainly fail. I exert myself to inspire him with hope, confidence, perseverance and self-control; to speak to him precisely as I wish him to speak; and to give him a practical illustration of everything I wish him to do.

Stammerers habitually avert the eye of the person with whom they are conversing. I direct him to steadily fix his eye upon mine, to brace up the muscles of the limbs and of the body, habitually to sit and stand erect, and to walk with the erect mien and the firm and measured step of the soldier. I show him how, by this tension of the muscle we excite the muscles of respiration and keep them on the alert, ready for action; and how, while they are thus braced up, a slight gesture will instantly fill the lungs with air and adjust the muscles of respiration for speech.

2. We then pitch our voices on a musical key, a tone or a semitone below the natural key of the voice. Our object is to give the voice the habitual musical intonation which public speakers cultivate; and we prefer the lower key because it results in giving the voice the character which elocutionists call the orotund, and does not attract observation as a higher key would. We chant a few notes



in monotone, occasionally rising or falling one or two notes, so as to cover the range of the voice in conversation, marking the accented note with a gesture.

3. I show him how to train himself to full, deep breathing. Standing erect, with the muscles braced, I raise my arm or change the position of the body, and the lungs are full of air; we utter the vowels with a full, prolonged sound. I show him how, by gesture, he can give the force which is necessary for accent and emphasis. We sound the semi-vocals, by which I mean the subdued vowel sounds which we hear on the unaccented syllables, and hear more distinctly when we prolong the sound of the letters *l, m, n, r, v, w*. These we utter with all possible fullness and force. With these we combine the consonants with a distinct enunciation of the consonant, closely observing the position of the organs, with a view of forming the habit of putting them accurately in position. We now chant the letters of a word and pronounce it with a full, distinct enunciation; then spell it naturally. In a few minutes he spells fluently.

4. We chant over a line in the multiplication table, dividing the sentences into metrical feet, and marking the accented syllables with a gesture as if beating time; then again in a natural manner, but distinctly marking the rhythm, accent and emphasis. In a few minutes he repeats the whole table without hesitation. We select a stanza of poetry, or a passage in prose resembling poetry in the rhythm and melody of its style; divide it into metrical feet, and first chant it, read it in concert, with a marked expression of the rhythm, accent and emphasis, and a free, natural expression of the sentiment. He now readily sees it by himself.

In this exercise, which has occupied perhaps an hour, he has scarcely shown the slightest hesitation; so that a spectator would scarcely suspect that he had any difficulty of utterance. He converses with me with very little embarrassment, and with my family, provided I am present. We follow up this routine day after day. I do not

permit him to speak without impressing upon him, full, deep, calm breathing, full sound, distinct articulation, and to speak precisely as he feels; if he feels glad, to talk glad, or if he feels serious, to talk serious; and always with gesture. With ceaseless vigilance I remind him of every departure from the rules, and I practice what I preach. For a few days it is necessary to confine his associations to a few friends who understand the principle of the treatment, and who will aid him in carrying them out. As he improves in confidence and self-control, I gradually increase the circle of his associates, but enjoin great caution for a long time, about placing himself in embarrassing circumstances. An hour's excited conversation will often neutralize the effects of a week's training, and the whole has to be gone over again under great discouragement.

You can say, when alone, any word or any combination of words, and the presumption is that what you can say in one place you can learn to say in another. You find, however, when you come to speak to another person, you become embarrassed, you avoid the eye of the person with whom you are conversing, the breathing is hurried and irregular, the air rapidly escapes without sound, and the chest feels as if it needed bracing up. You probably have an excitable, impulsive temperament that is easily embarrassed, and at some period of your life have suffered from some disease which impaired the vital energies, and made the body weak and languid. Eager to speak, you brought to your aid volition to give you a current of air, before the vocal organs were keyed up, and of course there was no sound, the lungs were quickly exhausted of air, and the muscles of respiration and articulation were thrown into spasmodic action. A few repetitions of this kind, and these irregular and abnormal actions become fixed by habit, and permanently associated with the attempt to converse with other people. In attempting to account for this, you will bear in mind that nearly all the sounds of the lower animals, and many sounds made

by men, are expressive of wants, emotions, desires, etc., and are uttered and understood by instinct. These instinctive sounds we mold into language by imitation, which also is very largely instinctive, so that almost everything connected with speech is accomplished by muscular movements that are independent of volition. For ordinary conversation, the ordinary instinctive respiration is sufficient, but this is too slow for excited speech, and unless we avail ourselves of other methods of increasing the rapidity of respiration, we must bring in volition, and here, I think, is where stammering begins. Speech is associated with involuntary breathing. Voluntary breathing is associated with blowing, whistling, and other movements of the organs which have no connection with articulation. Even the motions that appear to be voluntary are prompted by imitation, and thus partake of the nature of instinct, and at length, by constant repetition, become automatic. We wish to speak, the thought suggests the word, and the word excites the organs of articulation without the direct intervention of the will. When I make an abortive effort to speak, the vocal organs are not keyed up, nor are the articulating organs placed accurately in position, nor do they acquire the tension and elasticity which is necessary to give the full consonant sound, nor can I get the organs that produce consonant sounds in right position except when associated with a successful effort to combine a vocal or a sub-vocal sound.

Bearing in mind the following principles, you will see at a glance what you need:

1. Everything connected with speech is involuntary, except the general volition to speak. Stammering comes from the fact that the system of nerves through which we express the emotions is not waked up; from the interference of volition in a process which ought to be almost entirely involuntary, the regular process of speech is interfered with, and abnormal action of all the organs results; and this difficulty is greatly aggravated

by the fear and embarrassment which accompanies the effort to converse.

2. We breathe in making sound, in a different manner than in ordinary respiration. In ordinary expiration the diaphragm relaxes and the abdominal muscles expel the air by forcing it up into the chest. In making sound, the diaphragm contracts and expels the air by contracting the circumference of the chest. Many persons habitually speak with the diaphragm relaxed. I can speak in that way when I am perfectly calm and unexcited, but I cannot carry on an animated conversation without the tongue tripping on almost every accented syllable. Physicians generally will tell you that it is not so, but it certainly is necessary to full, clear, far-reaching sound that the air be expelled from the lungs by the contraction, and not by the relaxation of the diaphragm.

3. There is a very close connection between the muscles of respiration and all the movements of the body. We cannot forcibly move the arm, nor change the position of the body without expanding the chest and bringing the diaphragm into that kind of action which we need for effective speech; and the diaphragm will not relax while these movements and changes of position are kept up.

4. The muscles concerned in speech are upon the same principle very closely associated with each other, viz.: the diaphragm and the muscles which key up the organs by which the vowel, sub-vocal and consonant sounds are made; excite one to action and the others readily follow suit. Get the diaphragm into energetic action and place the consonant organs forcibly in position, and the vocal and sub-vocal will readily key up; or get a vowel or a sub-vowel sound, and the consonant organs adjust themselves with perfect order and precision.

Now, sir, you have a clear idea of what you want: 1. Have confidence in yourself. 2. Train the muscles concerned in breathing to full, energetic and deep respiration; throw out the breath forcibly and calmly. 3. Calm down the animal and excite the emotional. 4. Get



perfect control over the action of the diaphragm. 5. Give the voice an habitual musical intonation, giving the vowels a full, clear sound, and the consonants the fullest intonation that you can possibly utter, taking great pains to bring up the voice full and clear upon the final consonant of a syllable, and not letting the tension relax until you catch upon the next syllable. Bring to your aid gesture, imitation, music, and carry with you a clear conception of natural sounds, the hum of the insect, or the wheel, or the whistling of the wind. In carrying out these principles, I would recommend the following order:

1. Firmly grasping the hand so as to make the muscles of the arm tense, fix your eye upon the eye of the person with whom you are conversing, with a determination not to be disconcerted nor embarrassed, and calmly fill the lungs as you do in drawing a deep sigh.

2. Your next object will be to train the muscles of respiration to calm, energetic and full action. Standing on one foot with the other advanced so that you can easily change your position, with the body well thrown back, forcibly raise your hand with the muscles all tense. The chest is now fully expanded. Bringing your arm forcibly down, pronounce monosyllables, giving every letter its fullest possible sound, and selecting such words as contain a full proportion of sub-vocal sounds, as, *braves*, *frames*, *brine*, *bounds*, *grounds*, throwing the utmost stress of the voice upon the final consonant.

3. Give your voice a musical intonation by pitching it upon the natural key. If you are not a good singer, get some one who is to pitch it for you. ( The natural voice ranges over an interval of about a fifth—*la*, *si*, *do*, *re*, *me*. Get this intonation and stick to it with inflexible resolution, until it becomes natural to you, and until you can transfer it to your conversation, running over the scale first on double then on triple time—*la*, *la*, *si*, *si*, *do*, *do re*, *re*, *me*, *me*; *la*, *la*, *la si*, *si*, *si*, *do*, *do*, *do*, *re*, *re*, *re*, *me*, *me*, *me*, training the voice, not loudness nor force, but fullness of tone, both on the vowel and consonant sounds.

4. Having trained yourself for some time upon elementary principles, select a passage of poetry full of emotion, melody and rhythm. First repeat it over as if you were singing it to yourself in undertone, marking the time forcibly on the accented syllables with the full intonation—not loud, but full intonation of the vowel and the full articulation of the consonants, and gradually change this to your natural style of reading, the musical intonation and the rythmical expression of the poetry. Scanning it as schoolboys do Latin, you will soon read poetry without any difficulty. Then take prose, selecting pieces that are written in rythmical style, such as you will find in the Psalms. Read a verse of the ninetieth or seventy-third Psalm as you read the poetry, dividing it into feet with a musical intonation, either standing as before directed, or walking and marking the time on the accented syllable.

5. It is very important that you confine your intercourse for a few days to a few select persons who understand your object, and the principles of cure, who are in thorough sympathy with you, and who will coöperate with you.

Recapitulation.—1. Fix your eye on the person with whom you are conversing, bracing up the muscles of respiration by bracing up the muscles of the arm.

2. Train yourself to full, deep and calm breathing.

3. Train the diaphragm to energetic and persistent action, calling in the aid of posture and gesture.

4. Give a musical intonation to your voice, and give the fullest possible intonation to the consonants, marking the rythm by emphatic gesture.

5. Persistently drill till all this becomes fixed by habit.

6. Cultivate cheerfulness, determination, calmness, and above all, never be caught off your guard.

## STAMMERING—A LACK OF WILL-POWER

Stammering—What is it? It is generally termed habit, more than that, we may safely call it a complex malady, being a mixture of careless habit, ignorance, cowardice, and enforced disease at one and the same time.

In the early stages, stammering is not at all injurious to the general health—either relating to body or mind—of the victim; it is usually acquired in childhood, ere the young mind can realize its direful effects or feel any alarm in regard to the results it brings into the future life for him.

At this period we may truly style it habit only. Soon, too soon, this happy ignorant state is past, and now, as the mind develops, he is conscious of his defect more and more each day, until at last the awful fact that he is a confirmed stammerer stares him in the face. Deep grief and burning shame now fill the place where so short a while ago blissful ignorance reigned supreme.

The trouble grows more intricate; now it is two-fold—physical and mental. Now would he gladly arrest the habit, but alas! it is beyond his control, though in *its infancy* it could have been arrested with little difficulty. Now it assumes to him the enormous proportions of a great roaring beast of prey, which ever stands in the stammerer's pathway ready to devour him!

Oh the sorrow of it! A warm, true heart—torn, bleeding, broken. A bright life shadowed, darkened, all through the thoughtlessness and carelessness of youth.

That sad "might have been" continually rings in his

ears, a daily companion, more gloomy than death, and the grave.

The physical extent of the difficulty is wrong articulation and improper vocalization acquired in youth, which by long practice have become a fixed habit, so tenacious as to be looked upon as second nature. The organs of speech and respiration, along with the muscles that control them, by constant misuse and abuse, daily grow more useless, until finally they fall into a state akin to disease, and may be so termed for want of a better name.

After the malady has existed for some time, and has grown into a mental form, it is often most painful for both, the would-be speaker and the listener.

The stammerer, ignorant of the cause of the trouble, and the proper position for his speaking organs, the all-absorbing fear of failure, being stronger than the will power, fear enters the mind and takes possession, ere the words can be spoken, and when he attempts to speak, his little enemy *fear* whispers exultingly, "failure, failure," which upsets the reasoning power, and in his frantic efforts to go on with speech, the glottis is spasmodically closed, which causes the breath to be suspended, producing a chopping, guttural sound, distorted features and often attended by the extremely distressing sensation of smothering. None can have an idea of the poor stammerer's trials save those who have undergone the same experience.

To all who find it amusing sport to ridicule the unfortunate many, burdened with impeded speech, we say,

"Go feel what I have felt

And bear what I have borne."

The organs of respiration are respectively larynx, trachea, bronchia and lungs. The larynx is a small triangular box in the neck, just below the root of the tongue. In front it forms a sort of bony prominence, in males more fully developed than in females. This bony prominence is often called "Adam's Apple," and is the seat of voice.



Below and joining the larynx is the trachea or wind-pipe.

The opening from the throat to the larynx is called the glottis, having for a lid, or cover, a cordate shaped part, called the epiglottis. This opens while breathing only, but involuntarily closes when swallowing is attempted, allowing food or drink to pass over it into the esophagus, a tube that leads from the pharynx to the stomach.

In the act of swallowing, we sometimes carelessly talk or laugh, which results in a tickling sensation and in turn compels coughing in order to expel the little intruding particles which have gone—as children term it, down the “Sunday throat,” in other words, the larynx.

The vocal cords are situated on each side of the glottis and are elastic membranes, projecting from the sides of the box to the opening. When not in use they present a V-shaped opening through which the air passes to and from the lungs.

In speaking or singing in a high tone or voice, these cords are short, tense and close together, opposite tones produce opposite positions.

Lowness and loudness of tones are governed by the quantity of air and the great or little force of expulsion. Joining the trachea below is the bronchia, which is a part of the trachea, and divided into two passages, each leading to a lung, one on the right, one on the left side, where they terminate in numerous small air cells, and lastly terminate in the lungs; the great bellows that keep the flame of life brightly burning.

The lungs are situated in the chest and fill the greater part of this cavity, the heart, a small organ, being the only other organ that has a place here. The lungs rest upon the diaphragm, a muscle of great importance, since the respiratory and tone-producing apparatus are chiefly governed by its movements.

To some extent speech is governed by the position and action of the lips, teeth, palate and tongue, although the latter is not—as many suppose—really necessary for the

formation of either sound or speech, as we have read and known of persons living, talking and singing without the aid of this little member, having been deprived of it in some way or born with the deficiency.

People without tongues cannot sound the letters, *t*, *g*, (hard), *k*, *q*, and *d*, as these sounds necessitate lifting the tip of the tongue to the roof of the mouth.

It is said that this unruly member—most unjustly called—is accountable for all the evil gossip, scandal and slander that curses the world. How so? This poor abused organ has no more to do with all this than any other part that governs speech. Study the position, and the office it fills in regard to speech-making. In quiet its (natural position is flat in the mouth, the tip just touching the lower front teeth.

Look into a mirror and note the action of the tongue while sounding the letters of the alphabet. The vowels are all easily made without direct tongue movement. In sounding *e*, the sides of the tongue are slightly elevated.

In the making of consonants, the positions vary, for instance, *m* and *n* stop the breath in the mouth and send it through the nose; *l* allows the air to escape at the sides of the tongue; *r* requires only a vibratory movement of the tongue; *s* needs the tongue placed near the roof of the mouth and the air expelled with a hissing sound; *p* and *b* stop the breath at the lips; *k* and *g* (hard) stop the breath at the back of the palate.

Breath is the foundation of tone, as tone is the foundation of articulate speech. To possess the latter we must first get full control of the former. This is easy enough when one knows how, but to the ignorant it is a tedious task and requires some practice before success along this line is attained; more especially in this true of those who have long accustomed themselves to the ill habit of improper breathing. To get control of the breath, simple breathing exercises may be employed with good results. In the offstart be impressed with the idea that abdominal breathing is of the utmost importance in the matter of

perfect health as well as in fluent speech, and that mere chest breathing alone is a practice for utter condemnation, and must never be allowed in any case whatever.

At first one may find it difficult to inflate the lungs and count ten while holding the breath, but after a little practice it is an easy matter to count thirty, forty and even fifty in this way. A tremulous tone is a warning that the breath has been held too long—which act should be avoided as it is of more harm than good. Accustom yourself to short counts at first; then inhale slowly while you mentally count five, with the muscles of the diaphragm hold the breath while counting five; now count five again while exhaling; over and over again many times do this, always making sure that the diaphragm is doing its part. When this little exercise is mastered, lengthen the time to ten counts at each act, inspiration,, pause and expiration. After a time it will be found that fifteen is as easy to count as five was at first. Time should be increased as the breathing gets under control. Although this of itself may not cure a bad case of stammering, if persistently followed up it will bring about results surprising and most wonderful, both in the matter of bodily health as well as speech. One should follow up these simple exercises patiently several times each day, being governed by the feelings as to the length of time required in the exercise. Always remember that no exercise should be prolonged to weariness.

When a full inspiration is made, the spine is straightened, head and shoulders thrown well back. The diaphragm descends, pressing the walls of the abdomen outward; the chest is increased in size and strength.

In expiring, the operation is reversed. Ordinary calm breathing is mainly performed by the action of the diaphragm.

Some of the many modifications of breath are, sighing, a prolonged inspiration and audible expiration, coughing, a violent involuntary expiration, also sneezing; but in the former the air is driven through the

mouth, while in the latter it is forced through the nose. Hiccough is involuntary inspiration.

Laughing and crying are generally involuntary—except in the case of some small children we have seen, where the crying may be forcibly termed a direct voluntary act, oft repeated—and produced by short, rapid contractions of the diaphragm.

The organs of respiration and speech, the brain, and the nervous system are so closely connected that whatever injures one is found to be harmful to all. This fact is of vital importance to the stammerer, since right here his chief trouble has its existence. The nervous system comprises the nerves, the spinal cord and the brain.

The nerves, not unlike telegraph wires, are so arranged as not only to connect various organs of the body, but at the same time they act as agents of sensation, thought, volition and emotion. The mind and body are so inseparably connected by them that there is not an inch of bodily tissue that is not filled with their intricate, delicate numbers, both afferent and efferent.

The brain, a complex organ, is the center of mind, of conscience, feeling and intelligent thought. It is egg or oval in shape, and consists of three parts, the cerebrum, cerebellum and medulla oblongata. Average weight is about fifty ounces. The cerebrum fills the front and upper chief trouble has its existence. The nervous system comprises the nerves, the spinal cord and the brain.

In appearance it is much like an English walnut, being *curiously* wrinkled and folded in many convolutions, which peculiarity does not show in early life, however, but increases with the growth of the mind. The greater their number and depth, the higher the mental power.

The cerebellum is just below the cerebrum in the back of the head and is sometimes called "*Arbor Vitea*," the tree of life," because of the beauty of its construction. This part of the brain controls the voluntary muscles and those that govern speech.

The medulla oblongata is between the spine below and



the brain proper above, and is fitly named the "*vital knot*," owing to its tenacity to life. It is said that the brain above may be removed and the spinal cord be injured, but the heart and lungs will continue to perform their offices until the oblongata is entirely destroyed. The whole brain is largely composed of nervous matter.

In the brain the desires originate, which are conveyed by a motory nerve to the particular muscle designated to execute the desire. For instance, we desire to speak, the wish is carried by a motory or afferent nerve to the muscles that control the speaking organs, but in the case of stammerers, ere speech is affected, thought being much faster than action—a returning sensory or efferent nerve carries to the brain a message of fear, and thus it happens that confusion of words and actions ensue.

From these facts we understand that all the nerves, directly or indirectly, communicate with the brain. It is very easy to see why stammering, by daily shocking the nerves, unduly excites the nervous system so deleterious to mental and bodily well-being. Stimulants in any form tend to aggravate the nervous system, more or less, and for this reason their use should be strictly avoided by all, and more especially by the stammerer, with the irritable, high-strung temperament, whose only hope of future speech lies in his power of self-control, steady nerves and inflexible will-power. Any now using such stimulants, as opium, wines, liquors, tobacco, coffee and tea, be persuaded to abandon their use to-day, and in exchange for this, your indispensable duty, receive a cool, calm temperament that nothing will excite.

Cultivate will-power with tireless energy, for this is the foundation of success in everything, for everybody, and the stammerer must have it or live out his life a failure. What is will? The innate, unseen power in the mind of every individual, the strength of which is recognized by determination, decision, perseverance, ambition and authority. How can we get it?

Some one has said, "Nearly all stammerers lack will-

power." We may go still farther and say truly, *all*, who continue the habit, lack the desirable possession of will; this being the case is the reason that so few have succeeded in life, and there are such great numbers of sufferers throughout the land.

Considering its long time existence, the inexpressible pain it entails, and the many really intelligent persons afflicted, it is truly astonishing to see and feel the little known of the organs of speech, and little practically done for the removal of this annoying malady.

Learned writers on physiology, although understanding the structure of the human body, likewise the ills that afflict mankind, have very little to say about stammering.

Men of science and learning leave the afflicted to fight their battles alone, it seems. Persons suffering from this trouble are, as a rule, so extremely sensitive in regard to their affliction, that they strictly avoid alluding to it in any way, which effectually prevents any but the closest observers from knowing the real, miserable condition of the mind, or the great tenacity of the habit which make their lives nearly unbearable. It is not at all strange that many are laughed at as victims of mere habit, which habit ought to be left off in the same manner that some men are said to leave off the sinful habits of swearing, drinking, etc. These people will tell you in confidence that "one is as easy as the other."

The want of confidence that exists between the stammerer and the world, in a measure, accounts for the little attention bestowed on the subject by the general public and by our government.

These many years have we groped in utter darkness, and alone; but soon we hope to see a change for our improvement. It would seem that the public opinion inclines to the belief that defective speech is a more serious drawback to those burdened with such than was once generally supposed.

It is to be hoped this misunderstood and peculiar class of unfortunates may live to see the day, perhaps not far

distant, when even they may share the generous, considerate attention which is so lavishly given the deaf, the dumb, the blind, the orphans and the aged, and many others of like nature, now supported by charitable public institutions everywhere.

While we patiently await the coming of this happy time, let us use the golden *now*, "the accepted time," for our own improvement so far as we are able. In the first place let us, or as many of us as possible, personally see to it that these defects are successfully treated and removed. To do this, some may be compelled to make sacrifices in more ways than one in order to obtain the means for the purpose.

The outlay for the undertaking need not necessarily be large. Do not hesitate, nor allow the matter of dollars and cents to longer stand between you and the fondly cherished hopes of a life-time.

After we have done our best (and no one can do more than that) and still find ourselves financially crippled and unable to take the desired course, let us then do the next best thing, that is, go to work with the view of honestly earning the sum lacking, employing the talents which the Father in His infinite love and wisdom so lavishly bestowed upon us as a birthright.

In the meantime, we must diligently study the matter of speech, that we may come to understand its many peculiarities, and be able to arrive at some practical method which we may use as a means for our own improvement, or self-culture.

Right here I wish to call attention to a few of the manifold oddities of the stammerer, in so far as I am able will give reasons for some of them. For instance, one is engaged in a deep study and aware of your presence, you speak to him softly, he answers readily, without hesitation, in an absent manner.

Again, you ask a careless question, implying by your manner that you do not expect nor desire an answer; to this he quickly and easily replies, also.

Now, look straight at him and pointedly interrogate him. See, when it becomes necessary for him to speak, how he is thrown into confusion.

Again, ask a question without seeming to notice him; as readily he answers without hesitation. Look at him and repeat the question; now he is unable to reply without his usual trouble. In the first cases he spoke in an abstract manner, ere the thought of fear could enter the mind; in the last, you leave no loophole for his escape; his confusion excites mental emotion and fear or failure precedes speech.

Now, if he stops to consider the reply a moment before delivery, he is able to put the will in force and can speak with ease; but there is the trouble. Stammerers are, as a rule, too impetuous, impulsive, or inconsiderate. Of all that I know, none differ greatly in this respect.

In the continuance of the subject, let us remember that our infirmity partakes as much of the imaginary as of the reality; persuade ourselves that it is not so bad as some others, and might easily be worse. Moreover, it is entirely owing to our lack of will-power that we are so involved.

Lay down a few simple rules, but compel yourself to rigidly adhere to them; certain hours for walking, riding, reading, rising and retiring. Stammering indulged in the largest part of a lifetime, cannot, like a discarded garment, be dropped at will, but reason teaches us to understand it as a matter to be educated away, as it were. We must commence with the intention of going hand-in-hand with the twin sisters, *patience* and *perseverance*, or else all our attempts will prove of little or no use.

The habit cannot be overcome by any number of muscular movements alone; nor by the addition of vocal or other exercises; but these, combined with strict regards to the rules of health, a determined will and a lot of patience, will, if persisted in, bring about a lasting cure.

Be patient, be persistent, and you will never need to be confronted with failure and disappointment. To those



lacking these fine qualities, a teacher is indispensable. He understands the disease perfectly and undertakes a cure with the full determination to effect it at all hazards. He fulfills his part of the contract, and compels the pupils to fulfill theirs. At the school nothing is present to divert the attention from the course of action assigned each. With nothing in the way, this entire time for study, a good teacher always near to guide, who has your welfare at heart, it would seem that nothing short of a miracle would prevent one from a permanent cure.

Every one cannot have the advantage of the school for various reasons. These persons should try what they can do for themselves, and to such I direct this article. Or others, who at present find it impossible to attend the institute, may find a means by which to arrest and better the difficulty until the time arrives, when by a teacher's aid the stammering is wholly done away with.

To build a substantial cure, first we must have a firm foundation. This is found in perfect health, and this is attained by a few simple rules, which must be duly regarded.

Direction for easy breathing exercises should be carefully studied. By these one may readily master the art of correct breathing, an essential to health.

Another necessity is pure air and plenty of it for respiration. Too much importance can hardly be attached to this matter. A good portion of each day spent in the open air will do more for health in the way of building up tissue and strength than all the tonics, pills and plasters ever put upon the market. Go out doors and swallow copious doses of pure air, nature's great elixir of life and God's best gift to man, so lavish and so free.

Air we must have every minute. Just think of that. The fact that we cannot live without it a minute is overwhelming, to say the least of it. Other needs may be put off at will, but air must come every minute, or death claims us. This is positive proof that pure air is neces-

sary to health, and may justly be termed the essential of life.

There is more of the life-giving and sustaining properties in pure air than in all the other life-sustaining elements combined. It stands to reason that all exercises when performed in the outdoor air must be doubly beneficial. For this reason one should spend as much time as possible in outdoor exercises, games, walking, riding and other pursuits that demand muscular action, being both pleasurable and profitable. All tend to develop the muscular and nervous systems, thereby acting as a soothing balm to those persons possessing high-strung nervous temperaments.

One good authority says, "One hour's exercise in the pure air is worth more than a week spent capering around in a gymnasium." By this we do not wish it understood that we condemn the gymnasium at all; on the contrary, we certainly believe it next in value to the open air for exercise, and to those who are denied the former, the latter is invaluable.

No exercise is superior to walking. Walking brings nearly all the muscles into action at once, and undue strain is put on none, besides long walks must carry one into the open air; another advantage. We should practice walking every day. When starting on a walk, get the figure in an erect position, with the toes pointing a little outward; now start in a moderate gait. One should be able to walk several miles without feeling much fatigue.

Muscular development and self-control at the same time may be gotten by the simple exercise of ball tossing. Procure two balls, such as children delight in; take a standing position, a rubber ball in each hand; with the right hand toss up the ball ten feet and catch it as it descends. Now toss the ball with the left in the same way, then one and the other alternately; then both at once. Always catch the ball by the hand that tossed it. This seems mere child's play in its simplicity, but for all that it is very amusing, and a really good rainy day exercise.

Perhaps to pure air, pure water is next in value. Too much can hardly be used, either for drinking or bathing purposes. We never knew of any perishing from the proper use of water. Drink it plentifully, hot or cold, before breakfast and after supper, at all hours and at all places, and take a bath not less than twice a week in winter and every day in summer. Warm or cold water may be used, as preferred by the bather.

In a few words regarding dress, let us suggest that the entire weight of all the garments be suspended from the shoulders, and that all articles of wearing apparel that tend to restrict free circulation and all movements of both body and limbs be strictly abandoned, and loose, comfortable clothing worn instead.

Fondness for any dish should never induce one to partake of it sufficiently to injure the health, but find what diet is best, and eat only that. Any sensible person knows what he can best eat; then such food only should be taken, and only when the system needs it. Over-eating is not only sinful, but is fatal to life. As many people die from this practice as from disease.

Inveterate stammerers experience no difficulty in pronouncing the words of a song, while singing. The reason for this is simply that the words follow one another in a rhymic order. If we follow this principle in common conversation, we must find ourselves talking better. We could not advise one to sing his words, though even that it seems would be preferable to some forms of speech impediments we have known; but rather speak in a slow manner, as schoolboys sometimes do in reciting. At any rate, practice this awhile along with the other exercises in question.

Strive to speak always in an even, measured voice, constantly keeping the mind on the manner of delivery and off the words being uttered. This way of speaking called rhythmic or measured-speaking is not recommended for daily speech but serves well for practice. Anything that serves to center the thought on the way of

speaking, that can draw it away from the words, will, if followed up closely, help in talking, more than it seems possible, and some cases may be cured by this practice.

Try this before you condemn it. Read aloud to yourself or to an audience, as preferred, every day, an hour or longer, using the measured tone just spoken of, and at the sound of each word pay careful attention to rhythm. In articulating each word after the manner suggested keep your mind fixed on the manner of utterance; be careful to note that the breathing is correct.

Always speak on nearly a full breath, while exhaling and so govern the breath by the muscles of the diaphragm as to pronounce slowly as many words as possible while the breath is passing. Do not carry this act far enough to render the last words inaudible for want of breath, but be sure that the last word is uttered in as loud a tone as those preceding it.

When rightly done, singing is another good vocal exercise. Govern the voice as in speaking and the result will be the same.

Before speaking, singing or reading, inspire slowly and deeply nearly a full breath, then by the action of the abdominal muscles make utterance on a long, noiseless expiration. Practice these exercises many times a day. It will in no wise interfere with other duties, and can be done without drawing attention to yourself. Two points in your favor, moreover, it is harmless and its value is not limited.

When inspiring, keep the lips closed. Nature decreed breathing through the nostrils, and for the purpose this part is fitly prepared for its office, having a natural filter composed of hairs, which project across the opening, effectually preventing the entrance of foreign bodies, such as small insects, dust and other floating matter.

Tone depends largely on the shape and size of the mouth cavity. Some stammerers, to hide their defect, keep the mouth nearly closed when speaking, which causes a mumbling and indistinct sound. For ordinary conversation, the



lips should be open to the extent that a small straw is easily inserted between the teeth. The teeth should never touch. When uttering sounds, do not allow the tongue to fall backward, for this will partially close the glottis, obstructing the current of air in the voice box, resulting in a muffled sound. For a clear, melodious tone, keep the glottis open, the jaws and lips apart and the tongue in its proper place.

The stammerer generally talks with a relaxed diaphragm, which gives little sound; for want of breath he gasps and tries spasmodically to continue speech. In his ignorance he imagines his tongue to be at fault, and on this belief tries to compel it to do its part, and so it overdoes the part assigned it.

In conclusion, I earnestly beg you, my afflicted friends, to accept for your welfare this rule: In everything you do have a good purpose in view; let the breathing of air, the drinking of water and the taking of food, as well as time for rest and recreation, all be for the purpose of bringing into your lives good will toward men, health, happiness and prosperity.

## STAMMERERS AND STAMMERING

Incidentally, in a conversation recently, a Methodist minister of English birth related to me some of his experiences with the letter *h*. A professor at the college which he attended in pursuance of his elementary studies, was also a Briton, but had Americanized his speech by educational methods. At one of the classes, this minister was called upon to read the passage of scripture, "He that hath ears to hear, let him hear." He read it, "'E that 'ath hears to 'ear, let 'im 'ear." "Ah," said the professor from Britain, addressing the ministerial student, "you have the same trouble that I had; this legacy has been handed down to us through generations, and now

what has been thoughtlessly given to us by our fathers must be eradicated through hard labor and close attention."

Stammering is often transmitted in the same way; it has been thoughtlessly handed down to many of us by our fathers and must now be eradicated through hard labor and close attention. Stammering thus developed is more stubborn than when simply acquired, because it is then a part of one. It is like dismembering the body to try and dismantle it. In the latter case, the elimination of it is like the mere removal of a garment, except as it gains strength by long continuance.

Stammering may lie dormant in one's system and never be awakened but for a sickness, a fright, or an imitation. Then, again, a sickness, a fight or an imitation may produce a derangement in the organism of speech which will manifest itself in stammering. In the former case the disorder is more stubborn than in the latter case for the same reasons quoted above.

Imitation is a very fruitful immediate cause of stammering. Even if one inherits the tendency to stammer, this tendency may never come to maturity if one is guarded from all suggestion of stammering and kindly influenced to avoid any imitation of it. But when one's weakness is in his speech, particular attention must be paid to the strengthening of the organism of speech in its natural functions, that, by external or physical application, an internal or mental reaction may take place which will forever overcome the once natural tendency.

Stammering begets stammering, not only in the one afflicted but in others through association and the imitation above mentioned. It is easy for a person who stammers a little to stammer more,—far easier than for a person who has never stammered at all to stammer a little. But when once the disorder has made the least inroad and is let alone it will be almost sure to go from bad to worse, especially if there be any inherited tendency to stammer.

What a boon it would be if all stammering were eliminated! If such a circumstance were to be brought about, the tendency to stammer would soon die out, and, in order to produce the habit, one must then make an effort. But, in the light of the past, it is probable that the present advancement of civilization would lay the hand of restraint upon such erring children in such a way as to make a lasting impression upon their minds, rousing in them a positive desire for self-improvement.

A stammerer should be very careful not to exhibit his defect in the presence of children. Children are very observant and the least irregularity in speech is noticeable to them; and if they are fond of a person they are very apt to imitate him, and so the stammerer, out of a kind and loving heart, may ignorantly cast a dark cloud over a child's future life. Some stammerers do not stammer while playing with children—they do not feel embarrassed except in the presence of critics, and the resulting relaxation eases the mind and makes natural articulation possible. If such a person watches himself on these occasions, he may be able to discover a cure for himself, or at least a method which, if pursued, would set his mind at ease.

Sickness, fright, or a deep sorrow, while sometimes the cause of stammering, may be classed among those things that provoke or irritate the stammerer in his affliction. A stammerer whose speech is quite fluent as a rule may speak with varying degrees of difficulty during an attack of ill-health, while others may experience great difficulty in speaking during a fright, an excitement or a sorrow.

#### PHYSICAL AND MENTAL EFFECTS OF THE CONTINUANCE OF STAMMERING

Have you ever stammered? If not, how much do you think you know about it? How much of the dread, the gloomy forebodings, the sense of inferiority and defeat, and the knowledge of the lack of an important avenue

to pleasure and success, do you think you can realize? Have you ever tried to engineer around a sentence? Stammerers have more than once. A stammerer sometimes starts a sentence and finds that he cannot finish it as he started it on account of one or more difficult words for him in it; he then has to use his ingenuity at substituting synonyms to express the same thought, or abandons the thought entirely and either stops or switches on to another thought. His conversation is thus disconnected and uninteresting from an intellectual standpoint, and he is regarded as "peculiar."

It is often the case that a stammerer is untruthful in little things on account of his disability. For instance: A boy's father expects him to gather the eggs every evening and record the number in a book. Some of the hens are Plymouth Rocks and some Leghorns, and the father is accustomed to ask the boy how many Plymouth Rock eggs there were each evening. The boy is a stammerer and the father is stern and the boy dreads this daily answering of the father's question long before it is asked, and gets himself worked up into such a state of mind that he can hardly make an audible sound. When the father asks the question the boy is apt to answer any number in the immediate neighborhood of the right one.

This habit of merely approximating the truth, sometimes leads to carelessness in other things and the friends of the stammerer soon find him drifting into neglect and indolence—but instead of laying the cause of the neglect and indolence to stammering, they reverse the order and lay the cause of stammering to neglect and indolence, whereas, if the stammering were removed, the other would pass away. How many times is this the case? It is distressing to think about it! How the stammerer is handicapped by not being understood, but, thanks to the Father, this dark cloud overshadowing the truth is gradually lifting and the stammerer's emancipation is drawing nigh!

Diffidence and indiscretion are noticeable in stammerers, sometimes one, sometimes the other, sometimes both. The



stammerer is diffident because of the natural shrinking from publicity on account of the knowledge of his deficiency. Being defective in speech, he seldom takes the initiative in that line, and he soon finds himself taking a back seat in other lines and letting others act who are less qualified than himself. He does not stand up for himself for fear of being unable to hold his own, and so he is walked over and his diffidence is augmented. He is indiscreet through the fact that he cannot always say what he wants to say, and, by substitution, the original idea is not always exactly expressed. This substitution if not carried on studiously, has a dwarfing effect on the mind, and the stammerer is cognizant of the fact that his speech is not at all in harmony with his thoughts. This produces a more or less distraction of mind which manifests itself at times in indiscretion. The stammerer, therefore, is regarded as being somewhat unbalanced and irresolute; but remove the stammering and these traits will soon pass away. All stammerers are not indiscreet, but the trait varies with the character of the stammerer and the characteristics of his affliction.

Have you ever noticed a stammerer's physique? Ask him how much he weighs and you are surprised—you thought he weighed more. He may be in health—his organs may all be sound—but his condition is the same as if he were overtaxed—his system is not far from bordering on fatigue even though his endurance at times may be great. There seems to be something which prevents the storing up of physical energy; this something is the condition of the mind. He is in a state of constant dread, and the harrowing result prevents thrifty action in the organic functions. This physical condition, of course, varies with each case of stammering and with the seriousness with which the stammerer regards his case. Some stammerers are more concerned about a light case than others are about a more severe one.

## DIFFICULTIES IN A STAMMERER'S CAREER

Stammerers are found in all walks of life, and whatever may be the calling, if young men or women are attracted by it, some stammerers will be among those attracted. Stammerers possess talent and ability in varying degrees, being in this respect equal to the average, and there is, or has been, in each one of them a desire for achievement and success, this being a prominent mark of young blood everywhere. I think it is not amiss to say that on account of the nervous temperament of stammerers, they, as a rule, aim high. By reason of this, failures are very depressing and disappointing to them. But their high aim sometimes partakes of the characteristics of fancy because they have not the means at hand wherewith to build a bridge over which they might pass to their wanted goal. This short-handedness, in a large measure, is due to lack of confidence, and, by dwelling upon an unattainable end—unattainable because of the lack of confidence in one's ability to master—the afflicted one is liable to become dreamy and impracticable, which traits are disastrous to the business of the present day. Here lies one difficulty in the stammerer's career—the unfortunate, as shown, is prone to the visionary.

In business, a man is valuable for what he can accomplish—his ability is measured by the result of his efforts. A man of resolution and strength is respected by his fellows and is enabled, by the esteem with which he is held by others, to bring things to pass. Talking, plays an important part in winning the respect and esteem of strangers, hence, the man in an active business pursuit must possess speech fluent enough to charm, as it were, those with whom he deals. This age of mental telepathy and the dominance of one personality over others by reason of superior strength, calls for a high development of the faculties, mental and physical. In this the stammerer falls short;—he is deficient in one important business faculty, and his whole self, together with his abilities, is

measured by this one failing. Business men do not want him, normal self-esteem leaves him, and the strength of his personality ebbs low. He is then unfit to cope with the rush of business and falls behind and out. We see here another difficulty in the stammerer's career. Small active business ability by reason of a partial lack of business persuasiveness.

The stammerer is, in a measure, debarred from social life because of his impediment. This reacts against both his prosperity and happiness;—against prosperity because, in some walks of life and somewhat in all walks of life, business is linked with social standing; and against his happiness because, where one is kept painfully aware of his invalidity, happiness is marred.

To be ostracized from social life alone is a great trial, but the stammerer must patiently bear this trial. The ostracism may not be complete in every case, but it is always partial and produces a more or less keen sense of regret on the part of the stammerer.

What a life of discipline the stammerer lives! His affliction teaches him the lesson of humility, meekness, patient forbearance, hope, peace and joy amid sorrow, virtue in privation, sympathy, and usually morality,—and if he succeeds in conquering his defect, faith, value of determination and an indomitable will (which is the key of success), the needs of his fellows, and the mastery of himself. Let stammerers, therefore, take heart; do not despair—"It is an ill wind that blows nobody good;" our affliction may simply be a school where we are being trained for a future great mission; at any rate, hold on—success only comes to those who make continual practical application of a real and definite knowledge.

#### CONDITIONS UPON WHICH A CURE DEPENDS

Conditions which favor a cure cannot always be discerned in every case by one who has not made a study of stammering. Something that may irritate one stammerer

may be unnoticed by another; one stammerer may be able to speak before a large audience with ease, while another, if placed in the same circumstances, would almost be thrown into spasms; one stammerer may be able to speak fluently when he speaks fast and determinately, while another must speak slowly and quietly if at all; one stammerer may be able to read fluently, but experience difficulty in conversation, while with another the reverse may be true. Each case is a little different from any other, and so it would seem that it is impossible to make general laws, the performance of which would be beneficial to all stammerers. But, as individual health is dependent upon conditions peculiar to each individual, and, as a common source will be found from which all these conditions spring, if they are traced back indefinitely, so there are common conditions which apply to all cases of stammering, and laws, which, if followed, will give beneficial results in each individual case.

The physical health of the stammerer is very important. When a house is disarranged the housekeeper is not satisfied and is sometimes irritated; when the body is disordered, the mind is not enjoying the same ease which it would if it were unconscious of the body; a fundamental condition to the highest success is, therefore, perfect physical health, and the nearer one comes to this, the greater will be his capacity for development in other lines.

A diagram of a machine, a cotton loom, for instance, may be made on paper. The object of the loom is to make cloth, but the drawing of it, although conveying the idea perfectly, cannot make the cloth,—that must be done by the machine when it is completed. If, when the machine is made, it is found that the bobbins cannot be shot with sufficient force to carry them across the loom between the threads, the accomplishment of the end for which the machine was built, is thwarted, and the idea fails of expression because of an incomplete mechanism,—a weak spring, possibly. And so the purpose of an



individual, however worthy, may be thwarted by some little failure in his physical organism,—a weak spring somewhere. An ideal alone cannot accomplish the result,—it must be applied—put into activity through mechanical means.

The first and foremost among the things which a stammerer must, therefore, heed, is physical health, which is dependent upon proper and regular nutrition, exercise and rest. A violation of the laws governing any of these will affect the health correspondingly.

Then the mind-phase of the difficulty must be given requisite attention. The condition of the mind bears a relation to the condition of the body, for the activity of the mind is maintained by a physical organism, the brain; whatever promotes the physical well-being, lays a foundation for mental advancement.

All eccentricities must be avoided by the stammerer; he must keep an even temper and have a clear conscience,—a ruffled conscience disturbs that peace of mind which a stammerer must possess that his speech may appear to the best advantage; hence, the stammerer must be moral.

The stammerer cannot always choose his environments, but, as far as possible, the surroundings should be conducive to peace and quietness, with a steady and unpretentious trend toward bringing him to a full and complete appreciation of his condition, and a cure of the impediment. Stammerers must not be allowed to relax, neither must they be held at a nervous tension, but they should be taught to go about everything in a quiet, undaunted, matter-of-fact way, striking at the root of all questions which come before them, and solving all problems by inductive thought. In this way the mental capacity will be enlarged, the stammerer will acquire the faculty of observation and logical reasoning, and his mind will be directed from the lamenting of his condition to the improving of it and to the fitting of himself for further usefulness to his fellowmen.

The task before the stammerer is great—the environ-

ment of an institution may be necessary to effect complete relief—but it is not impossible, and when once the stammerer has mastered himself, he has so strengthened his will and enlarged his faculty of determination and his perception of success, that he is in a position to better appreciate the conditions around him, and to apply means for the successful manipulation of the same for the accomplishment of desired results.

#### OPPORTUNITIES FOR A CURED STAMMERER

What are some of the virtues and elements of success that a stammerer does not possess? Among others, self-confidence, self-control, determination, strong will-power. Without these the afflicted one will remain a stammerer; with them, stammering must soon retire. A cured stammerer has overcome a state of being which is sustained by the lack of these virtues; he is now in possession of them. The degree to which the cured stammerer possesses these virtues depends upon the characteristics and the severity of the case of stammering from which he has been cured. The greater the trial overcome, the greater the success, and the more lasting and beneficial the results.

One who has never stammered at all may not possess these virtues, because he has never had material need of them, but the cured stammerer has been disciplined, tried as by fire as it were, and is in possession of them in degrees, as stated above, varying with the severity of the case cured and the character of the individual; he appreciates the value of the various elements of success and the proper use of them for the attainment of desired ends; his character has been advanced, and his morality, taking cured stammerers as a class, is above the average; his physical and mental health are good, these being, in a degree, necessary conditions for a cure.

The stammerer's life of conflict and the true character of his affliction are little appreciated by the public in gen-

eral, and of the stammerer himself and his association still less is cared; but he is one in our midst, and civilization cannot progress and his cause be ignored.

He is a sufferer. Civilization advances in the wake of enlightenment, which is the result of the recognition of truth as it is revealed; to deliberately ignore that which calls for recognition is not only stagnation but retrogression; therefore, the stammerer's cause must be investigated, its merits determined, and the sufferer given the sympathy, respect, and benefit which are shown to be his due by such investigation of progress.

The stammerer is looked upon as one who has not the will power and determination to succeed or else one who has been sadly neglected. Either one or the other of these is usually true, for, though he may have the determination, yet if, through ignorance either on his own part or on the part of someone else, that determination is misdirected, failure ensues—the result of negligence somewhere. But, if determination is coupled with a clear conception and positive knowledge of what ought to be done, success ensues and the stammerer is relieved of his impediment by perseverance in the practical application of his knowledge.

The stammerer's life is lonely. It is possible to be alone in a crowd. When one is alone by himself, the very quietude and non-interruption invite meditation, deliberation and reflection, and such activity of the mind keeps one company,—to feel alone in a crowd is pensive—to feel or know that you are deficient in the one faculty which is necessary to agreeable association and which, if judiciously exercised, opens many avenues to pleasure and success in life—to feel that you are deficient in this and thus inferior to your fellows—is depressing to the mind and trying to the body.

This sense of loneliness seldom leaves the stammerer who appreciates his affliction. He wants to be affable, but in the attempt, as in the majority of his efforts involving speech, "he puts his foot in his mouth." Thus

being continually baffled, his humiliation is augmented and his oft-recurring wish "to sink through the floor" engages his mind; being unable to do this, he feels conspicuous, and is certain that his conduct is being particularly noted. The accompanying embarrassment in no way lends him assistance, and his conflict with his affliction leaves him distressed in mind and exhausted. He thus feels singularly alone.

He is not without sympathy; no one who is thoughtful can fail to appreciate his sorrowful condition. There are times, however, when the unconscious behavior of the stammerer in his efforts to articulate touch the sense of humor even in thoughtful and sympathetic persons. For the less sympathetic class, the stammerer is a source of amusement; and such persons seldom succeed in their (feigned) effort to conceal their merriment. The stammerer knows all this; he seldom fails to note all pleasure enjoyed at his expense, and his natural modesty impels him to retire. Human nature courts attention when it is favorable; but the attention which a stammerer receives on account of his speech is usually unfavorable, and the unfortunate one shrinks from notoriety.

In business, a stammerer is not wanted because he does not fill the want. The activity of the commercial world demands persons who are fluent in speech to take charge of its interests. The very atmosphere of this world is irritating to the average stammerer; his nervous system soon gives way under the strain and he either loses his health or his defect becomes more troublesome. Some, however, overcome their impediment through the environment of the business life. The sense of ability to cope with the responsibility placed upon them gives rise to confidence, which is the flood-tide necessary to ride them over the irregularities and hindrances against which they would stumble and fall should they pass that way unbuoyed. But these are exceptions. The average stammerer is not as fortunate; he faces the responsibility of life with a shudder; he longs for seclusion; the world to



him seems cold, and he steps out into it only with fear and trembling.

This is not a natural condition for a man; it is a condition brought about by the physical and mental stress endured by the stammerer, and in the majority of cases he is unable to help himself. He deserves sympathy, of which he gets but little; he deserves help; he deserves the benefits afforded by the advancing civilization.

It seems somewhat strange at first thought that a stammerer should not be able to break his habit by his own efforts; but are there not many instances of physical and mental ills which the person suffering is unable to treat? The same general symptoms may be displayed by two different persons, but the treatment used to effect a cure in the case of one may be of little value in the case of the other; the persons differ constitutionally and are, therefore, affected differently from the same general cause; indeed, upon close analysis, it is seen to be a fact that there are as many different diseases to which the flesh is heir as there are patients suffering. It is not strange, therefore, that the sufferer cannot always effect a cure by his own efforts.

The disease of stammering follows the same general law; and, for the same reason, the sufferer, though he may be bright and talented, cannot always effect a cure by his own efforts. But there is a recourse; as the physician, who has familiarized himself with the human body, its condition, changes of condition, and the causes which give rise to these conditions and changes, is able to fathom the irregularities of an abnormal physical condition and correct the difficulty, so stammering, which refuses to yield to treatment based upon fancy, may be corrected by a man (a phonologist, if you please), who has familiarized himself with the mental and physical conditions which are present in persons who stammer, and the causes which lead to these conditions.

The interests of the stammerer have been so long obscured by mediæval darkness that the joy, with which a

sufferer hails the gleams of hope as they appear, can scarcely be realized! The day has dawned when stammering will be doomed, and one invariably feels a sense of deep gratitude towards the men of charity and perseverance who have contributed so largely to the needs of a class of humanity who are singularly and literally bound, and alone in a cold world. Such deeds will never die!

## A THEORETICAL DISCUSSION OF SPEECH DEFECTS

In the following paper I purpose to discuss the origin and treatment of speech defects in the light that biology, psychology and kindred sciences throw upon the subject. While it is true that what the stammerer wants is vigorous action, vigorous treatment, and not theory, yet the condition of the stammerer has not escaped the notice of modern science, and he is referred to in the standard scientific books a great deal oftener than is commonly supposed to be the case.

Someone has said that the theorist is the most practical of men. Like all epigrams, this statement is somewhat exaggerated; yet it contains a world of truth. The man at the microscope, with a working basis which is often purely theoretical, has made discoveries which have startled the world and revolutionized modern thought. The new science of biology, with its teaching of evolution, the story of the beginning and the gradual development of life; psychology, the study of the mind; anthropology, the study of man in his infancy—all these sciences have sprung into being at the fiat of the student in the laboratory and the library within the last half century. The experiments of the great thinkers who made these sciences possible have acted as a sort of ex-ray apparatus on the material universe and on the history and character, the mental and the physical make-up of man.

The greatest shorthand writer in this country says the

way to learn shorthand is to write it. The treatment for speech defects should be similar: the way to learn to talk is to talk. However, we should not forget the fact that we must consider the "how" before we do things. Theory generally comes before practice. When theory and practice are simultaneous, a happy condition of affairs exists, indeed; but all great inventions, all great movements, all great discoveries begin in thought, and are later developed by further investigation and experiment.

Very few things escape the laws of development. Everything develops: good and evil are developments. Perfect speech and imperfect speech are both developments. It is the purpose of this essay to trace the development of perfect speech and to try to find those causes which make for imperfect speech. We will consider the subject positively rather than negatively. It is more important to build up than to tear down. What we are after is the building up of perfect speech more than the eradication of imperfect speech.

The best way to study a thing is to go back to the beginning. We may trace back to the origin of speech in three ways. There is a time when the child cannot speak: we may go to the forest of Africa and find tribes of savages who cannot even to this day be said to speak in the full sense of the term, and we may follow with Darwin and his confreres back to that original man, with a speech so rudimentary as to be almost composed of a few primitive grunts and gestures. And right here is the origin of speech—the *grunt*. A *grunt* is a *sound*, and the sound is the beginning of human speech. The word for "yes" and "no" (generally accompanied by a gesture, as the nodding or shaking of the head) is today little more than a grunt. "Yah" is the first German word the English-speaking person learns. It is surprising how far a foreigner can get along in this country by only nodding or shaking his head and saying "yes" or "no." No doubt our early ancestors got along for ages without any *articulate* language at all by simply making signs or

gestures, accompanied by grunts. The child today talks with his eyes and fingers long before he can utter *articulate* words. He will point at objects and grab for things. In his eagerness he will sometimes exert his whole body and make his chest and entire abdomen fairly dance—the entire trunk—to get at something or to go to his mother's arms; you can easily imagine the sparkling eyes, the smiling, eager lips (though dumb as yet), and the gesticulating arms and fingers that accompany such eager desire. This is the heaven-given pantomime that the actor must learn to use to accompany and illustrate his speech; which all of us use to a more or less degree when excited or angry, and which the deaf mute and sometimes the stammerer use to aid them to express themselves.

The human being is the only creature that can speak. Animals make sounds, but these sounds, while they often mean something and are understood by other animals, are not articulate speech. A herd of deer, when grazing, will stretch out in a long line; if the deer at the beginning of the line hears or scents danger, he will make certain sounds in the line. When the danger becomes imminent the first deer will give a cry which means "flee for your lives," and the whole herd will take to flight. This is a sort of sound language, but it is not articulate speech. That was reserved for the delicate lips of man.

But man's language, in its inception, was scarcely more than inarticulate sounds, ejaculated vowel sounds to express alarm and hunger, the two of the most elementary sensations. Our exclamations today indicative of pain or pleasure are generally simply modified vowel sounds. "Oh!" for surprise, or pain; as, "Oh! I have hurt myself;" or, "Ouch! I have cut my finger!" or, "Pshaw! go way!" expressive of annoyance. The child "cooes" for pleasure, and cries with pain. He does not say: "I am happy," but gurgles with laughter. He does not say to his mother: "There is a pin sticking me in the thigh



which is causing my sensory system a good deal of annoyance," but he "bawls." When the savage inhabitants of the Coral Islands first saw a Frenchman they never asked him what his name was, nor did they call him "un Francais." They called him "the *wee-wee man*," that is, *yes-yes man*, because *oui*, the word for *yes* in French is pronounced *wee*, and the natives called the French the "*wee-wee*." The child does not call an engine, "an engine;" he calls it a "chou-chou" because he had heard the engine go "chou-chou;" he may call a duck a "quack," or a little chick a "pee-pee," because the little chick goes "*pee-pee*." The savages of the west coast of Africa, those grown children, call a tavern a "*hee-hee*" house, that is a laughter house. Hearing the laughter and merriment of the men within, they make a new sound-word and call it a "*hee-hee*" house.

Just as a phonograph reproduces sound, so speech, in its beginning was patterned more or less after sounds heard in nature. Today many of our English words are imitative words. We speak of *rippling* waters and *babbling* brooks; the *hum* of machinery, the *boom* of cannon, the *tolling* of the bells, the *moaning* and the *groaning* of the wind, the *shriek* of the steam *whistle*, and sometimes call champagne *fizz* and beer *pop*. Edgar Allen Poe's poem, called "The Bells," is what might be called a *sound poem*.

Hear the tolling of the bells—

Iron bells!

What a world of solemn thought their monody compels!

In the silence of the night,

How we shiver with affright,

At the melancholy menace of their tone!

For every sound that floats

From the rust within their throats

Is a groan.

And their king it is who tolls;  
And he rolls, rolls, rolls,  
    Keeping time, time, time,  
    To the throbbing of the bells—  
    To the sobbing of the bells;  
    As he knells, knells, knells,—  
    To the rolling of the bells,—  
    To the tolling of the bells,  
To the moaning and the groaning of the bells.

This poem is practiced in many schools of elocution as an exercise in tone-production, volume and tone-coloring. It is a poem full of long vowels, long sounds. Pronounce the word toll and tolling in the manner a funeral bell tolls and see the effect. Dwell upon the *o* of the word and then, using your tongue as a clapper, strike the consonant *i* very heavily, using a full, vigorous volume of breath, and you get the effect of a bell I have often heard at a cemetery when a funeral procession enters the gates. In the fifth line, every actor knows the effect that can be secured by dwelling upon the vowel sound *i* in the word shiver. So suggestive is the sound produced that when it vibrates on the lips of the speaker his shoulders shudder and his whole body recoils almost instinctively. One of the best known readers on the American platform told me he read this poem as an exercise for vocal endurance, volume and ease of tone-production several times a day for years.

How shall we learn to talk distinctly? One way is by measuring sound. This thought alone, if carried out vigorously, is enough to make a stammerer talk plainly enough for producing records for a phonograph. In a little pamphlet, published by a Phonograph Company as an advertisement for their talking machines, entitled, "The Art of Making Phonograph Records," occurs the following suggestive paragraph on sound production: "In making talking records, speak naturally, but with energy. Do not force the voice too much, or the

result will be jerky. Articulate plainly. Sound *s* and *t* with particular distinctness. If it is required to get an extremely loud record, good results are often obtained by talking in a half-singing manner, or drawl." If a stammerer were to carry out conscientiously the methods here suggested and get someone to drill him; if he would train in it as faithfully as the athlete does his "track work," he would win in the contest.

Speech, then, in its origin, is sound imitation. The moment the child's mind begins to recognize things, to distinguish things about it one from another, and as its mind develops, there develops a corresponding need for vocal expression. The child *must* speak. Now, how will it talk? Well or poorly? What determines the child's mode of talking? Its environment. By environment is meant the child's surroundings; the child's home; the carpet on the floor, the paper on the walls, the faces and the voices of the parents and friends—all these constitute the child's environment. From these he gets his first idea of the world about him. If his mother speaks French, he will speak French; if English, he will speak English. If she speaks good, pure English, the child will speak good, pure English. And here is the fatality of it all: Suppose she does not; Sarah Cowell Le Moyne, the well known elocutionist, and now equally celebrated actress, in speaking of this calamity in an article in *Collier's* for November 10, 1900, says: "I advocate taking the child voice and moulding and training it. Vocalizing in reading and speaking does not entail any such labor as vocalizing in music; yet how few who employ singing masters consider the importance of a cultivated speaking voice. Generally when an adult goes to a voice instructor he is in despair at the condition into which careless talking and slovenly habits of speech have brought him. Habit of speech becomes fixed with especial stubbornness, and many a cultivated man or woman finds difficulty in getting rid of incorrect inflections and improper tone-production absorbed from companions of their childhood."

In the same article she says: "There are today thousands of parents whose children twenty years hence will reproach them for having neglected their voices. When a child begins to speak its voice education should begin. And how is it begun for many children whose opportunities might be of the best? By giving them over to the companionship of nurses, whose speech is ignorant and coarse. Nasal notes and harsh burrs, even if after education succeeds in eliminating faults of grammar and grotesque forms of speech, give the baby the first impressions of the art of speaking, and first impressions are the strongest and most lasting. Many lovely children whom I know are saddled with the faulty speech of their nurses, handicapped with bad talking habits, from which they will never wholly recover. Right here is where the development of the kindergarten will, in time, work a great reform. I am certain that one of the outgrowths of the recognition of the value of infantile education will be schools for the training of infants' nurses. And may I be there to insist that these coming guardians of the babies take a preliminary course in voice culture. Furthermore, I am an advocate of the stage and platform as educators. It is well to let children hear frequently what the human voice is capable of in the way of power and expression. Only be careful in the choice of their models."

Speech, at its beginning, arises in answer to the needs of a pressing environment. The child must *name* things; and as his mind develops and he learns to distinguish things that are hurtful from things that are beneficial by actual experience, as, for instance, the red glow of a heated stove from the rosy glow of an apple or a piece of dress goods, there comes a need for words, and these he hears from his parents' lips, and fortunate he is if his parents speak well naturally, and more fortunate still if they know how and take any interest in instructing the little one in the elements of speech and its production.

The magic time for the cultivation of speech is child-



hood and early youth. It is then that the child begins to form his life-habits. It is then that habits of accurate, refined speech, as well as habits of regularity, punctuality and orderliness are formed as easily as habits of inaccurate and blurred speech and habits of listlessness and carelessness. Childhood and early youth is the golden time of reflex action. The impressionable mind of the child is like the wax record of a phonograph. It registers and easily retains all it hears, whether good or bad. Childhood and youth are the periods when piano playing, the languages, mathematics, typewriting and shorthand, dancing and skating, are easily learned. Every good musician, as he grows older, blesses the conscientious master who taught him correct and easy methods of fingering. He is no longer bothered by the mechanics of finger gymnastics. Fingering, mastered in his youth, he is able to express the soul qualities in his playing. The adult, who begins piano playing, if he is brave enough and is not frightened from the attempts by the sheer thought of the hours and hours of laborious practice and valuable time it takes to learn to play, finds he is all fingers and wishes he had so mastered them in his youth as to have forgotten he had any. That child is indeed fortunate whose mother has looked after his speech as carefully as she has looked after his personal cleanliness. I know of a family who had only one child, the idol of its parents' hearts. The unfortunate child, to the consternation of the parents, as it grew up, talked to me what sounded like a web-footed dialect. It could not say seventy-six; it said "webbenty-wix." It could not sound *s*; it sounded *w*. What was the cause of this? The parents had used the child like a pet poodle, or plaything, and invariably mocked the little one's baby talk. Encouraged by the persons whom it naturally looked to and patterned after, it grew up talking this distorted English. Much money had to be spent in giving the child private lessons in talking when it grew older, to say nothing of the humiliation both the parents and child itself felt.

Nature, reflex action and growth are all on the side of the child. Given a good home, pleasant, moral, sensible parents, and a fair education, there is no good sensible reason why the child should not develop into a happy useful man or woman, with all his or her faculties working in harmonious order. But suppose for some reason or other the child does not develop symmetrically. Suppose, due to heredity or to the stress of an unnatural or oppressing environment, the child's powers of speech are hindered in their development. Suppose it stammers or stutters. What shall we do with it? Let us suppose the parents are able to take it to a speech specialist. What kind of a speech specialist? To a surgeon? No; speech is a mental matter. It arises in answer to a need in the child's mind to name the objects around him. The child might know and recognize the objects around him without calling them names, but he must have resort to the physical organs of speech to give utterance to his thoughts so he can communicate with others. In some manner the medium of action in the desire in the child's mind and the physical expression of that desire have been interfered with, and inharmonious, halting action results.

The speech specialist will scrutinize the child, or the adult, if adult it be, carefully, to see what kind of individual he is. Now, there are at least three types of people: the mental type, the emotional type and the physical type. These types all demand different treatment, although the fundamentals of that treatment may be much the same. Teachers of the art of acting in our best dramatic schools divide the human body into three parts or zones: the intellectual or mental zone, the head; the emotional zone, the chest; and the physical zone, the trunk and the legs. The eyes that sparkle and the lofty forehead where thought resides; these constitute the intellectual zone; the heaving chest, where the sighs come from and the sobs, and the swellings of the angry passions rise, is the emotional part of the body; the abdomen, the vital part of the body and the legs, the foundations upon which

the body stands, constitute the physical part. So the face, the hands and the feet may be subdivided in the same manner. The intellectual part of the head is the forehead and the eyes; the emotional part is the nose, as, for instance, we say a large nose represents sensuousness and generosity. The lips and the jaw are the physical parts of the head, for with them we grind our food and chisel our words. The fingers of the hand are the intellectual part of that member; we finger the piano and the typewriter with the fingers; the emotional part is the broad palm; we recoil with horror from a serpent and put out the palm of the hand to ward it off; or, we extend the palm to express greeting and pleasure at the sight of a friend, when our lips simultaneously exclaim: "How glad I am to see you!" A good dancer points his toes, the intellectual part of his feet; the heel is the physical part.

In some people the emotional predominates; if it is backed by a strong physique, and if the individual is fairly well balanced intellectually, we have a normal man. If the physical side of the person is inclined to be weak or not proportionate to the intellectual and the emotional, we have a person who is likely to lose his balance easily or who finds it difficult to maintain it at all times. Now, the speech specialist must find out what kind of a patient he has to deal with. If he finds him wringing his hands; drumming upon the arms of the chair with his fingers, or toying with a knife, or drawing squares and angles upon the carpet with his toes; when he begins to talk, if he tries to say five words where he ought to say one, if his mind seems to act quicker than his lips can move if he wears himself out in a few minutes; the specialist knows he has a stammerer of the nervous type. He will need a mental regimen. If the patient can sit still in his chair and shows no emotional excitement until he begins to speak, when the efforts he makes betrays the fact that he cannot control the muscles of his lips and throat, we infer that he is a stammerer or possibly a stutterer of the

physical type and will need a regimen which will give him increased muscular control as well as the proper coördination between mind and muscle.

Now, if speech in its origin be sound production, the first thing to be looked after is the patient's power to produce sound. What is his physical condition? What is his breathing capacity? Is there a lack of coördination between the production of breath and the utterance of words? Is the defective articulation of the patient caused by improper breathing habits? It may be he can pronounce one word at a time, but when required to read connected discourse or enter into conversation, his breath fails him, or the merely mechanical work of breathing and articulating at the same time frightens and worries him and throws him off his balance. The stammerer is not the only one who should learn to breathe. The statistics published by the United States census bureau at the taking of the last census shows that one-third of the annual death rate is due to weak lungs. Wind cannot be produced without a bellows, and it is no use to begin drill work in the niceties of articulation until the bellows is in perfect working order.

One well-known writer says: "No classes in our schools are of more vital importance than those of voice-training and articulation. The visitor may hear, at any of these schools, a class of young men and women going through the elemental sounds. It has a comic effect; but the teacher is always very earnest.

"The pupils are learning not only to utter sounds clearly but to breathe properly as they talk—a mechanical process, just as a young blacksmith must learn to work the bellows to keep a steady flame. In the higher classes of the same department the niceties of tone are taught—purity, resonance, flexibility; these things and many more, before they come to expression. With that, of course, comes in the great art of dramatic elocution, but not until these grown children have gone back to their babyhood and relearned how to talk. Let the reader think, for a



moment, how perfectly under control they must have the organs of speech, not only to express to auditors many feet away the various human emotions without apparent exertion, but also to imitate, when need be, the myriad vocal eccentricities and faults of their fellow-creatures, to say nothing of the various dialects which should be at the actor's command."

With the perfection of the breathing apparatus and the control of the breath, should come a general toning up of the whole muscular and nervous system. There is nothing so successful as success; nothing is so inspiring as the doing of things and the overcoming of obstacles. The student should improve in spirits. His face should brighten and his eyes sparkle with new hope and confidence. As one writer says: "The basis of a good voice is a good stomach. Eat well, sleep well, and walk well. It seems odd, perhaps, that drooped shoulders and immovable hips in walking should affect the voice; but they do. Whatever adds to the breadth of lung keeps the voice full and strong, and the full and strong voice is the voice that can be trained. It is possible for every young person to improve the voice. Only one must be always watchful! So many children—men and women, too—merely drop the jaw and let the words come out as they will, without emphasis or expression, conveying only half their meaning. You grow indignant at such mumbling, just as you resent a shambling gait in a man or woman."

Regnier says: "The first condition of the actor's art is to make himself heard. That is an axiom I never cease to repeat; and, in order to be heard, it is not necessary to shout, but rather to *speak distinctly*, that is, to accent the consonants and give to the vowels and to the diphthongs their correct sounds. This is the foundation of the art of speaking, the subject to which you should give particular attention. Correct articulation and accurate pronunciation aid the general expression; but though the actor be ever so highly endowed by nature, he will never amount to much if he speaks badly." But how shall the student

be taught to speak well? Suppose he *can* do it in a formal manner, taking great care to be always on guard. Can he practice such a method in everyday life? Will he have the *sang froid* necessary to do this, and even if he has, will people not be justified in smiling and staring at him? How will he learn to talk naturally; learn to obey and yet conceal the rules of articulation? By practice and mastery. The teacher is now in the realm of reflex action, in the realm where *absolute mastery* of principles is demanded. The student must be drilled in the elements of the English language, in the vowels and consonants, in the analysis of the vocal structure of words. And he must be drilled and drilled and drilled. He must study to play his lips like a master studies to finger the piano. He must study words singly and then in groups. He must be drilled in the forty or more elementary sounds of the English language until he can make them separately and without hesitation. He must learn how to give vigorous, healthy *d*, *z*, and *t* sounds. He must learn that the consonants form the backbone, the framework of words and that a vigorous attack upon the consonants and a correct, vigorous vowel sounding, give the word a good, healthy, well-rounded body. He must learn to combine words into groups, phrases, sentences and finally connected discourse.

What kinds of groups shall he use? Shall we give him the "Data of Ethics" and ask him to read Mr. Herbert Spencer's famous definition of evolution; "a change from an indefinite incoherent homogeneity to a definite coherent heterogeneity through continuous differentiations and integrations?" No, we must begin with the words which the elementary emotions prompt. We must always advance from the simple to the more complex. That is why nature always acts: this is what is meant by growth. The student should be induced to say what he really feels, and from the very first attempt he should try to make his words express what he actually feels. He should not only perform the physical act of speech with his lips, and

the intellectual act in pronouncing the word with the proper sounds and consonants; he should at once begin to coördinate the emotional, the feeling part of the process, with the mental and physical steps involved in speech production.

Study of the higher forms of dramatic speech follows the same order as in the instruction given in all the other departments—that is, from the simple to the more complex, from the literal to the more involved.

The first necessity in dramatic reading is to clear the way for deeper conceptions by insuring exactitude in delivery and a clear objective picturing of meanings. This is obtained largely by practice in reading aloud entirely undramatic material, such as advertisements, shop signs, etc.

The next step takes the pupil to the study of simple and elemental impressions and then to manifestations in exclamatory form. Ordinary colloquial dialogue is studied with the object of obtaining an appreciation of the sensitive impressions received by the listener while another character is speaking, as preparatory to the response in the speech of the character impersonated.

If men stopped feeling, they would stop talking. Feeling of some sort lies at the basis of every word we utter. When a person is wrought up with the strongest feeling, he generally talks the best. Some of our most intellectual men are our worst feelers and our worst talkers. They let the intellect run away with them; they become so accustomed to thinking and feeling with a pen that they lose control of the lips through sheer vocal inactivity. The clear, bell-like speech of some uneducated person uttering some trivial but heart-felt words of endearment or merriment become the envy of the chest-cramped man of study. A very masterful address, made by one of the presidents of our larger universities at his installation, failed to produce any impression upon the audience; because in the large music hall where the ceremonies were held, his voice could not be heard twenty rows from the stage.

We should not go to the opposite extreme, however, and here is just where the difficulty lies. We should not allow ourselves to be carried away by feeling. One of the causes of stammering is a lack of control of the feelings, or a disturbance in the stammerer's emotional nature, due in its origin possibly to embarrassment caused by his efforts to talk, or to other causes. Feeling, such as extreme grief, terror or anger, even paralyzes the speech of a perfectly normal person. The object of the drill work in building up new speech habits is to give control. When the student has gained control of single words and the physical organs which produce them, he should be drilled in delivering sustained passages without stumbling or wavering both in reading and in conversation. Nor must the instructor allow him to forget his breathing.

If any emotional fear gathers around the utterance of certain words, this will naturally be dispelled as confidence increases in response to repeated victories on the part of the student. He must exercise his lips for ease of utterance, fluency and sustained power, exercising, of course, always in a practical manner, that is, with words, the symbols he is to use in his actual life work to express his thoughts.

A method of teaching for the cure of speech defects should "hold the mirror up to nature." The method itself should inspire the confidence of the student by its naturalness and practicability. The best teacher is nature. The instructor is trying to get the student back to nature, and that is what the student yearns and prays for in the bottom of his heart. He wants to be natural and to escape the marks by which his peculiarity of speech renders him conspicuous among his fellow-creatures. The height of all art is to conceal art. While the artist cannot reproduce real stone walls in his picture, put real leaves on his trees, what the observer does demand is that the illusion produced by the brush and palette be complete. The student suffering from defective speech demands more. He says: "I am a man, with a mind and



what a good method of teaching should do for him if it claims to restore him to natural speech, and this is what the student has the right to demand.

In learning a foreign language, the grammar must be mastered step by step, beginning with the elements and the simple statements of the language, and advancing, mastering every step as every step is taken, to the more intricate and delicate construction. He must memorize formulas and so memorize them and practice them until he forgets in the actual applying of them in practical speech that they were ever learned as formulas at all; he must acquire a large and rich vocabulary. The artist must master perspective before he can submerge his technique in delineating the soul and catch upon the canvas the divine light of the human countenance for his Madonna and his Christ. The pianist must forget his fingering in the mastering before he can put soul into his music and stir the heart of others by the inspiration his delicate touch lends to the keys. Now, nature is very kind to most of us, and we learn to walk without much trouble as children—or at least we are unconscious of it. The little tot, it is true, when he first starts out, makes desperate efforts, and uses his hands, head, arms and body as well as his feet; but he learns it when he is as yet scarcely conscious of the pains he takes to learn, and no grown-up person ever thinks of describing to you how difficult he found it to learn to walk when he was a child any more than he would think of making his mind control each separate step he takes in walking down the street. When the awkward boy of seventeen tries to dance or skate, or ride a bicycle, he finds it a rather difficult feat to accomplish at first, much more so than walking was to him, because now he is fully conscious of the labor and pains it takes to learn. The student who is striving to attain perfect speech must practice and work so as to establish new habits of speech. He must exercise himself vocally until he has acquired such command over himself that it ceases to be a command. When he has done this, we

know the return to nature has been made. Here is the testimony Henry Ward Beecher offers at this juncture:

"I had from childhood a thickness of speech arising from a large palate, and when a boy I used to be laughed at for talking as if I had pudding in my mouth. When I went to Amherst I was fortunate in passing into the hands of John Lovell, \* \* \* \* and a better teacher for my purpose I cannot conceive. His system consisted in drill, or the thorough practice of inflections by the voice, of gesture, posture, and articulation. Sometimes I was a whole hour practicing my voice on a word—like justice. I would have to take a posture, frequently at a mark chalked out on the floor. Then we would go through all the gestures. \* \* \* It was drill, drill, drill, until the motions almost became a second nature. Now, I never know what movements I shall make. My gestures are natural, because this drill made them natural to me. The only method of acquiring effective elocution is by practice, of not less than an hour a day, until the student has his voice and himself thoroughly subdued and trained to right expression."

Every great thing that is done in this life has at the bottom a strong foundation of faith. Every great cathedral, every great temple, every great building, every great movement in human progress, stands for the concrete expression of so much faith and hope. The student may ask: "If I give up everything and devote my whole life and soul to vocal mastery for three or four months, or possibly longer, can I be assured of final victory? Can science offer me any positive assurance that I will succeed? The great underlying principle of the tremendous progress that science has made in the last century is the axiom: 'Evolution is the law of progress.' The word evolution means simply development. The law of development has guided the invention and the gradual improvement of the steam engine from the first and crudest engine to the immense monsters that whirl our great trains through space or afford power enough to run the electric

cars of great cities. Henry Drummond, in the 'Ascent of Man,' on page 340, says: 'Evolution has ushered a new hope into the world. The supreme message of science to this age is that all Nature is on the side of the man who strives to rise.'

Now, what is meant by evolution or development? What hope has it to offer to those afflicted with vocal troubles? It offers a very definite, positive hope; it offers the hope of *adjustment*. What is meant by adjustment? Adjustment is the adjusting of ourselves to new conditions. Evolution may be defined as the continuous adjustment of internal relations to external conditions. The meaning of this may best be illustrated by the story of the evolution of the horse. Two great necessities perpetually harass the animal kingdom and the savage man—hunger and defense. These pressing necessities actually change and adjust the bodies of the animal to meet them. A great many centuries ago there was no such animal as the horse, as we know it today. The forefather of the present animal we know as the horse was a clumsy animal like the bear. Some of these flabby, bear-like animals, at some time or other, left their native forests, where they could quickly and easily escape their enemies by climbing trees, and could get all the food they wanted by prowling stealthily in the brushwood and suddenly pouncing upon their prey. Their paws were large and flabby, suitable for grasping the limbs of the trees in climbing. From some cause or other, possibly a lack of food or from the fact that they were being hard pressed by their enemies, a portion of these animals deserted their wooden homes for the open plains. Now, what happened? They met new conditions in the level, open, unwooded country. They could no longer crouch in the deep brushwood of the forest and pounce upon their prey, because there was no brushwood to hide in. They must now chase the swift-footed deer or other agile animals for their food or starve. And the bear began to run. There were no trees for him to climb now, if he met a stronger enemy

than he was, he must fight or run. The enemy being the stronger, he naturally preferred to run; it is a law of nature that all animals follow the path of least resistance. When the bear found himself obliged to run for food and safety, his flabby, clumsy paws began to adjust themselves to this new necessity, and began to harden. As time went on, they hardened more and more until finally the *hoof* began to appear.

It is a well known fact that some of the Indians in South America, who still lead the outdoor, savage life their forefathers used to live, have feet so hard as to be almost hoofs. The story is told in the Youth's Companion of one of them who went into a blacksmith's shop and happened to step upon a piece of red-hot iron. He stood still for some time and did not notice what he was standing upon until the odor of burnt flesh attracted the attention of the white blacksmith, and the Indian jumped from the iron with a cry of pain as it burned down into the tender flesh. The Indian had acquired his hard, callous feet from constant running in the open country. This is what happened to the bear. To meet new conditions, his feet adjusted themselves to running and hardened into hoofs. He learned to fight and left off prowling and cringing. It is well known what a vigorous fight a horse can put up with his narrow, slender feet and mail-clad hoofs. I say narrow, slender feet, for the very form, the body itself, of the bear underwent a change to meet the requirements of its new life. The exertion he was obliged to make in fleeing from his enemies took away his fatness, and the fleeter he became, the slenderer and more delicate his feet became.

This is what is meant by development. Man's body has undergone the same changes. There is a marked difference between the hand of his earliest ancestors and the hand of the diamond cutter and the piano player. This difference is all due to gradual adjustment to new and higher things. There is something divine in this wonderful adjusting process. It is like God's promise in the



rainbow. If we strive, if we struggle: science says nature is on the side of the man who strives to rise. What can the man, troubled with speech defects, do to adjust his speech to new and more perfect conditions? The first thing he must do is to seek these conditions; seek the open plains and leave the brushwood of stammering. He must go to some good institution where he can be taken in charge by instructors skilled in the educational methods of growth and adjustment. He must live a life of new conditions for a time, and strive to meet them. Because he has met an enemy, who is a little stronger than he is, he must not run. He must fight, and be developed by that fight. That fight, under the guidance of skillful, scientific methods, carried on in a school the very atmosphere of which says: "You must speak plainly," will end in victory. But the man must seek a bracing environment of this character; the institution he attends must be environmental, that is, he must be in a school where he is constantly attended to, constantly urged to struggle. "Eternal vigilance is the price of liberty." He must not let himself go backward, even for a day, an hour or a minute. If he does, his chance of recovery will be but slight. This is why serious speech defects cannot be dealt with by sending the pupil to an ordinary school for a few hours a week. As soon as he is outside of the walls of the school, he will go backwards. He is like a young bird who leaves the nest before he is able to fly. He must wait till he grows stronger; wait until he has been so disciplined and has so disciplined himself that he has almost forgotten the discipline; wait until complete spontaneity has been restored; until the body obeys the dictates of the mind, and the lips respond and make known the thoughts of his brain in a perfect, spontaneous way. He must not leave the strengthening environment of the institution he attends until he has completely mastered his body, and, as one well known writer says, "has placed it under arrest." "For the first thing to be learned from these facts is not that the *body* is nothing and must now

decay, but that it is most of all and more than ever worthy to be preserved. The moment our care of it slackens, the *body* asserts itself. It comes out from under arrest—which is the one thing to be avoided. Its true place by the ordained appointment of Nature is where it can be ignored; if through disease, neglect or injury it returns to consciousness, the effect of evolution is undone. Sickness is degeneration; pain the signal to resume the evolution. On the one hand, one must 'reckon the *body* dead'; on the other, one must think of it in order not to think of it."

Everything in life is paid for with a price. Nature gave man nothing without he struggled for it. Mental accomplishments, like perfect, beautiful speech, whether employed in vocal music or in the still diviner music of the voice when uttering the thoughts of a great mind, are bought with tremendous mental endeavor. The finished actor, whose every word paints some struggle, some aspiration, of the soul within, has perfected the art-gift which God endowed him with, only after years of practice. Working with the right methods, in the right manner, and with the necessary perseverance, success is assured even to the humblest. And the gift of perfect speech is a reward worth the labor.

"By it (speech) alone, in any degree worth naming, can the fruits of observation and experience of one generation be husbanded to form a starting-point for a second, nor without it could there be any concerted action or social life. The greatness of the human mind, after all, is due to the tongue, the material instrument of reason, and to language the outward expression of the inner life."

I have said a good deal about the effort the student should put forth. I might add something in regard to the teacher. Stammering is a nervous trouble. The student is not an ordinary student; he is rather a patient. He needs encouragement. The teacher of speech, like all real teachers, should be magnetic. When we consider how many actors and public speakers in the pulpit and on

platform fail for a lack of personal magnetism, we know what magnetism means. Christ, the divine teacher, must have been a man of extraordinarily magnetic qualities. If a speaker fails to draw a few hundred people crowded into a small house to hear, what must have been the magnetism of Christ who has drawn all the world to him? The teacher should have a magnetic, smiling face. He should lead the pupil to think that his case is not so bad as he (the pupil) thinks, and his confidence and trust should awaken a corresponding confidence and faith in the bosom of the student. The teacher should have a mind enriched by the thoughts of the great men of the present and the past, and he should try to show the student that speech, in the final analysis, does not reside in the breathing apparatus or the physical lips, but in the mind. His life should be an inspiration to the student, and the student, following the teacher's footsteps, should feel his speech begin to transcend matter, and the physical difficulties and mental hesitation disappear as the mind enters into the undisputed possession of its own. Of course, I have in mind the ideal teacher, but he is not a myth nor a dream. Go to any large college, and ask for the foremost professor, and you will find the ideal man.

The teacher must surround his students with a quickening, enthusiastic environment, and this is especially true of the teacher of the art of perfect speech where everything depends on that environment and without which no progress can be made. In a school for the rectifying of speech defects, the teacher must know his pupil; he must know each and every one individually and as individuals. The underlying principles of medicine may be in general similar, but no doctor would prescribe for a hospital by wards. The teacher must study his pupil carefully. He must then work with him with a view to harmonious development and coördination of the mental and the physical, trying to calm and tone down the disturbed emotional state which speech difficulty has brought about. He must try to blend the three states together, perfecting

the physical, enlarging and strengthening the mental, and restoring the emotional to its normal state. When the forces that make a man a *whole man* have been made to work in perfect harmony and perfect coördination, then the teacher's task is done and not till then, and then the student may venture out with entire confidence upon the sea of life to make new conquests for himself.

### HOW SHALL THEY BELIEVE

A stammerer's greatest stumbling block, so far as his own consciousness goes, is the feeling which he has, under certain circumstances, that it is impossible for him to speak. The point to which he must come, if a cure is to be effected, is that of knowing that he can speak, wherever and whenever he chooses. So long as the feeling or thought that he cannot speak, occupies and controls his mind, even though it come but seldom, he is not free.

Lewis defines stammering in its last analysis as a lack of coördination, the broken link in the chain between thought and speech, coming at the point where "the mental energy of the will fails to stimulate to action the motor organism of the body."

Now, what connection can we trace between the action or non-action of this "motor nervous force," which is a physiological fact, and the mental states of a stammerer, of either fearing he cannot speak or knowing he can?

Professor William James, in his *Psychology*, in the chapter on the will, says that this "mental energy of the will" (to use Mr. Lewis' term), or effort of the will, in any difficult action, is not applied to the muscles themselves, but to the thought of the action. "Effort of attention" is made to get the idea of the action clearly before the mind, to keep it there in the face of opposing ideas; and when the thought in all its clearness and power really fills the mind and gains its consent to be made real or to be performed, the muscular action necessary follows with-



out any special effort of will being applied to them. All this, of course, providing that the physiological arrangements for the transmission of the nerve current are intact.

In the case of the stammerer there was, I suppose, in the first place, some slight physical derangement or sensitiveness in the brain, but it is a well proven fact that this can be overcome by training, in connection with the growth and development of the mind; and it is of this growth or change, which must take place in a stammerer's mind, and its relation to his ability to control his speech, that I want to speak.

We start with the general statement that the thought of any bodily action, when sufficiently clear and strong, will produce the action, and that the effort we make in doing a difficult thing is essentially an effort to bring the thought of it clearly before the mind and keep it there, in spite of the spontaneous drift of thought being all the other way. We hold our attention to it until it grows and gains a hold upon us and secures the consent of our whole being to the performance of the action.

Let us try to understand a little more definitely what this clear and full thought, that perfectly commands the motor energy of the nerves, involves.

With a little reflection, it is clear that the most perfect performance of any difficult action depends on three things—*first*, that we desire it as an end in itself, or as a means to an end; *second*, that we understand how it is to be done, that our mind grasps the principles that underlie the performance of it; *third*, that our muscles have a certain amount of exercise in the direction desired. It is a matter of time and hard work, often, to secure this thought which commands the obedience of the muscles, but when these three things are combined, we have the consent to the action yielded by the whole man—the heart ardently desiring it, the understanding thoroughly instructed and convinced, and the muscles the ready instruments for its performance.

These conditions are the basis for a full and complete

confidence in our ability to perform any action. We have said that they are also the conditions that control the motor nervous energy, and in them we thus have the connection which we before spoke of tracing, between the action of this energy and a stammerer's belief in his ability to speak. His lack of confidence, his fear of such different results from those which he desires to produce, is the mental fact that corresponds to the physiological fact of the lack of motor power.

A stammerer's speaking organs will obey the dictates of his will or his desire to speak, when his knowledge and practice of the various steps involved are complete, when he has come to such an understanding of the laws that govern the working of his mind and body, that there is no room left for the slightest doubt of his ultimate ability to speak as he desires, to creep in. In short, he will speak perfectly when his confidence that he can speak is perfect.

When a cure of stammering is effected, instead of being controlled by nothing but his doubt and fear, the stammerer will have come to realize what are the natural forces and normal powers of his own body and mind; his comprehension that they are governed by law, that certain conditions being fulfilled, certain results are sure to follow, will give him a solid basis for his confidence and will do away with his fear and doubt.

He will understand that he cannot make himself talk by a sheer effort of will, but only by using the organs of speech in obedience to the laws they were made to follow. Mere mechanical ability, in the correct use of the organs, however, will not be sufficient. His training and information must result in his coming to a new realization of himself, of the powers at his command, and this realization, this "new birth," will enable him to control his embarrassment, his fear, his discouragement; to persist in his efforts hopefully and patiently and with increasing power. In his "Talks to teachers on psychology," at the end of a most impressive chapter on the laws of habit—which I would advise

every stammerer to read—James says, “New habits can be launched on condition of there being new stimuli and new excitements. \* \* \* sometimes these are of such a critical and revolutionary character that they change a man’s whole scale of values and system of ideas. In such cases, the old order of his habits will be ruptured; and, if the new motives are lasting, new habits will be formed, and build up in him new or regenerate ‘nature.’”

Some such stimulus as this, I believe, must affect the stammerer’s mind before he can build up the new habit of speech. The change may come slowly or may come suddenly, but come it must. It may help us to discover perhaps what are the actual conditions under which a stammerer’s confidence develops, and this change of nature occurs, if we follow the experience of a stammerer from the time of his putting himself under treatment. This experience is, I believe, typical of a certain class, though not of all.

The faculty of speech, which is usually acquired unconsciously during childhood, through imitation of others, is, in the stammerer, imperfectly developed or arrested. He has come to the years of dawning self-consciousness, and to the realization of what this infirmity of his means in his future life. Before this, it has caused him much misery and mortification, has shut him out from some pleasures for which he has longed; but, on the whole, he has taken each day as it came, with the happy irresponsibility of childhood. Now, however, there unfolds before him a vision of his future, hampered by this terrible inability for self-expression, this lack of the common means of communication with his fellows; and with this realization comes, in tenfold measure, fear, confusion, embarrassment and increasing inability to control his speech.

This is the mental phase of the trouble, and though often held in check by favorable physical and social conditions, its growth is sure, and the stammerer finds himself increasingly confused and controlled by the feeling that it is impossible for him to speak.

When this stammerer places himself under treatment, he probably does so in complete ignorance, not perhaps of rules and methods to be followed, but of the causes of his trouble and the relation of these rules and exercises to these causes; that is, he understands none of the reasons for the treatment. He comes because he has heard of others who have been cured, because he hopes, blindly, that somehow he may be cured.

At the outset of his treatment he is met with the statement, most emphatically enjoined upon him, that in order to make the cure successful, he must believe fully in the efficacy of the method employed and in his own ability to talk. Now, in all probability, if he is thoroughly honest with himself, or at all skilled in the art of knowing his own mind, he will realize that his doubt of these things is much stronger than his belief in them. It is a far cry from the condition of confusion and uncertainty that is characteristic of his mind at this period, to this state of assurance in his own powers that is enjoined upon him. This feeling of doubt is perfectly natural under the circumstances. He has nothing in himself, in his past experience, nor in his understanding of the causes of his difficulty, to give him any reason to feel confident. This feeling which so controls him, of being unable to speak, is due, partly, I believe, to a physical condition; is caused by sensations coming from the organs of speech themselves, due to their continued wrong use, and can only be done away with by ceasing their wrong action and adopting the right. This, of course, he does not understand, and so this feeling has a far greater influence over him than it otherwise would have.

The first bit of real confidence, of well-founded hope that comes to the would-be-cured stammerer, comes probably through his faith in his instructor. He must believe that he can be cured, but at present he can see no reason for believing it except in the experience and assurances of one whom he has reason to believe knows more about it than he does. He, therefore, resolves to pay as little



attention as possible to his doubts, and follows up all rules and regulations carefully, saying to himself, "I don't understand at present how I am going to be cured, but I am going to follow every direction and believe that I *shall* come to understand some time, how it is to be done." He thus yields his mind, for the time being, as well as his body, to the authority and guidance of another.

The next step in the growth of this confidence that is so all important to the stammerer, is the change before mentioned, brought about in his feelings by the change in physical conditions, due to his drill in breathing and vocal exercises and to the measured talking. This drill results in freeing him, ordinarily and for the time being, from the feeling that it is impossible to speak the words that he desires. He now feels that he can speak, he has the courage and confidence to try, because he has stopped the wrong use of his vocal apparatus and is using it in a normal way. This change in him is often so great as to seem little short of miraculous to those who do not understand it. The conditions under which he finds himself while at the Institute have something to do with it; as the atmosphere is charged with courage and cheer, he finds himself surrounded by a sympathy that comes from a complete comprehension of his difficulties, and which is not pity; and above all this it is the first time in his life that he feels his equality with those with whom he comes in contact. However, the principal cause of the change produced in him, is physical feeling, caused by the right use of physical organs; which, translated into mental states, means freedom and courage to speak.

The trouble in some cases is that our stammerer becomes over-confident. He has secured two of the conditions that are necessary for true confidence, for thorough control over his speech, namely,—he desires, as he never has before, to be able to talk naturally, and he has also secured the proper exercise of the speaking organs that should enable him easily to do this; but the third condition is wanting, namely, that comprehension of the prin-

ciples upon which the ability to speak is based, which shall make it clear to him that it is possible for him in time to gain perfect control over his speech. The consent of his heart, his will, and of his muscles, is gained but the consent of the understanding is not his.

With some temperaments, the vitality and the will may be strong enough and the nerves sufficiently steady, to enable him to carry the cure through without understanding how it is done, but when the mental phase of the trouble is strongly developed, this is necessary in order to relax the mind from the state of nervous tension and worry, in which it is habitually. One noted writer says: "I might relax my body out of the nervous strain of fright all day; if my mind insisted upon being frightened, it would simply be a process of freeing my nerves and muscles that they might be made more effectually tense by an unbalanced, miserably controlled mind. In training to bring body and mind to a more normal state, the teacher must often begin with the body only, and use his own mind to gently lead the pupil to clearer light. Then, when the pupil can strike the equilibrium between mind and body, he must be left to acquire the habit for himself." This little quotation contains, in a nutshell, the whole truth regarding the cure of stammering.

Now, what are some of the truths which a stammerer's mind must grasp in order to give him the poise and power of mind he needs?

Probably the first thing he senses is the fact that he has an apparatus for making his thoughts vocal. This statement may sound rather ridiculous for, of course, he knows that he has a throat, tongue, lips, etc.; but in its moral use, the control of the speaking organs is not conscious; it is acquired unconsciously during childhood and becomes automatic; ask anybody how he talks, what the process is, and, on the spur of the moment, he cannot tell you. The stammerer must gain the conscious control of every separate part of his speech mechanism as well as of

the whole in its coördinate action. He stammers in his mind; he can speak a word correctly and easily if he can *think* of it beforehand as being so spoken; he notices only the result of the process, and does not realize that he stammers because he uses his vocal apparatus wrongly.

At first he sees little relation between the exercises he is required to practice and his ability to say what he thinks; but the information he receives concerning the structure and mechanism of the organs of speech, together with his drill and practice, soon make him conscious of the fact that, if he wants to say anything, he must use this apparatus in a certain way.

When he realizes this, each exercise has its meaning for him, he understands the reason for it and so he practices intelligently, with a definite realization of the end in view, and not mechanically.

Still, although he has grasped the fact that this mechanism of his must be used in a certain way, and knows what that way is, he finds that he has not always the power to control it; it fails him sometimes when he most desires to use it and tries hard to secure it, and he fails to understand where the trouble lies.

This confusion probably arises from the fact that, while some of the muscles of this speech apparatus are under the direct control of the will, namely, those of the respiratory and articulatory organs, others—those in the throat that produce the sound or make the breath vocal—are not; but are regulated and controlled by the ear.

One of the greatest bug-bears of the stammerer's life is the thought of certain consonants that are particularly hard for him to pronounce; try as he will, he cannot get them out; they block his utterance most effectually. This was my own experience, and it was only after much trial and tribulation that it began to dawn upon my mind that, although my greatest seeming difficulty was with the consonants, the real trouble lay in the non-production of tone or vowel sound. I often felt, when wanting to say a word, that there was nothing there, nothing in the word to say,

and I was coming gradually to understand that this was because I so choked off the vowel sound that there was no vehicle, as it were, on which the consonants could come forth, when the stammerers' paper called "*The Phono-Meter*," published by Mr. Lewis, put the whole truth of the matter before me, most clearly and convincingly.

There is no need for me to go into his exposition of the matter in detail. If a stammerer will try to speak the vowel sound in a word, the consonants will come of themselves; the control of the voice must come through the ear.

This is the natural way of learning to talk; the child hears a sound and imitates it, and when a stammerer begins to learn to talk connectedly, speaking one word after another in regular succession, his utterance must be guided by the mental sound or thought of his own voice, speaking word after word regularly, measuredly, continuously.

Klencke says that a stammerer has lost all feeling for measure or rhythm in his speech, together with power of speaking one syllable after another in regular succession; that "he has no ear for his own voice" in conversation, and "has no idea of the correct length of vowel tone;" and this power he must cultivate.

It is not sufficient that he gain the power of controlling his breath, of producing sound strongly and correctly, or of combining various vowel and consonantal sounds. The power to do this, constitutes the material, or part of it, with which he builds his conversation, but the plan of the structure must be in his head first, before he can materialize it; he must have the power of sustained, continued, intelligible use of these sounds, and the dynamo that supplies the power to make the whole complex organism for producing speech work in perfect coördination, is the thought of the sound of his voice speaking in a regular, even manner.

Everyone will recognize the truth of this in connection with musical ability. A person with a good ear hears



a tune once and remembers it; hears the sound mentally and thus reproduces it with his voice; can play by ear, because the tune is sounding in his mind, and his fingers seek the notes on his instrument which correspond to those of his inward hearing.

By this training and cultivation of his ear, then, which is necessary for the stammerer, we mean the cultivation of the capacity for mentally hearing the sound of his own voice used in speech. This, of course, all the vocal exercises and measured talking tends to do, but he needs to be conscious of this general fact in order to fall into reliance upon mechanical method. The psychological fact upon which this principle of control of the speech by the ear is based is, that, "under normal conditions," as James says, "speech goes on from auditory cues; that is, our ideas do not innervate our motor centers (for speech) directly, but only after arousing the mental sound of the words; this is the immediate stimulus to articulation."

To this truth are due the facts: that a stammerer can often speak a word which has given him much difficulty, immediately after some one has spoken it for him; that the large majority of stammerers can sing, the mind being fixed upon the time and measure and not the words; that they can read in concert with others, and that poetry is easier to read than prose, because of the rhythm.

When this principle, that the organs of speech are innervated and dynamically controlled by the ear, is once understood and concertly realized by the stammerer, when he has at last consciously experienced the fact, the bugbear of certain consonants, or even vowel sounds that are hard for him, will begin to lessen and words and sentences will come easily and naturally because the sound, the stream on which they are borne along, flows forth at will under the guidance of the ear.

The experience of the truth of this principle will cause the stammerer to realize just where the value and necessity for measured talking comes in. The measure emphasized at first, as it must be, appeals to his ear, which is

untrained and dull, and makes an impression upon it, that nothing else would. By concentrating his mind on this feature, his attention is taken from the stammering thought, and at the same time an impression is made upon the mind strong enough to be recalled in moments of confusion.

This feeling for measure and rhythm should not only be cultivated in his speech, but in all his actions. It will help him to relax all nervous tension; will enable him to do everything more slowly and deliberately and in all this, as well as in the calm, measured talking, he will set an example to the nervous, excited and rapid world about him, that it sadly needs. In rhythm lies the secret of the stammerer's success.

The effort which he must put forth is, not to "speak in this way," but, "to think in this way of speaking." It is the control of the mind he is seeking, not, primarily, the control of the muscles; he has that easily, when the mind is undisturbed.

When he once realizes this and stops to collect himself, he is able to command the thought of, and feeling for, the measured talking and thus, to speak what he desires. Here again we quote James in support of this point: he says, in speaking of the "effort of attention" or "will" necessary to perform any difficult action, "The difficulty is mental, not physical \* \* \* it is that of getting the idea of the wise action to stay before the mind at all. When any strong emotional state is upon us, the tendency is for no images, but such as are congruous with it to come up. If others offer themselves, they are instantly smothered and crowded out," (how well a stammerer knows that; try as he will, at times he can think of nothing but stammering,) "but the inevitable effect of *reasonable* ideas over others, if they can once get a quiet hearing, is to work and work, until they have frozen the very vital spark out of all our (nervous) mood."

In all this growth of his understanding and experience, in this obedience to law and in the cultivation of patience

and will, which obedience demands, the stammerer comes gradually to himself; to the consciousness of his own powers of body and mind; to the realization of "that Power, not himself, that makes for righteousness,"—or rightness; and his comprehension of these realities is the true basis for an unshaken confidence that he shall succeed. In this "new nature," which is the result of his new thought and new habits, he recognizes the ultimate end of all his efforts to overcome his stammering. The end is not as he had thought, simply to be able to talk as others do, but to be free to develop and grow into the full possibilities of his power.

The stammerer may come to this realization slowly, or it may come to him quickly; if he is left to work it out for himself, it will come slowly; if he is able to avail himself of the instruction and experience of others who know the way, his solution of the difficulty is liable to be a quick one. Experience and scientific knowledge concerning this disability are rapidly advancing, and with the spread of this knowledge, light is breaking in on many lives that have been lived under a cloud, dark indeed, in which, heretofore, there was to be seen no silver lining.

## A STAMMERER'S ADVICE TO STAMMERERS

Stammering is a lack of due control over the organs of speech; a lack of coördination between the mind and the organs of articulation, lack of self-confidence, lack of will-power and lack of determination. It is often said that stammering is a habit, without giving it any further thought and consideration. The stammerer's defect may, at its beginning, have been purely a habit, the result of mocking others thus addicted, until, gradually, the habit becomes real and firmly acquired, rapidly developing into the mental phase—confirmed stammering. Stammering is an affliction which belongs to a group of various speech impediments, having its seat in the so-called, speech center of the brain, manifesting itself by spasmodic or convulsive effort. The cause of stammering has, until of late, been greatly neglected; even in medical literature a treatise upon this subject is rarely found. Stammering is manifested through the spasmodic or convulsive action of the muscles of the respiratory, vocal and articulative apparatus. These spasmodic contractions may be divided into two classes: The first are a series of short spasmodic contractions, rapidly following each other; the second are a series of long and protracted spasmodic contractions. Occasionally these two forms of spasmodic contraction may be found in one and the same individual, alternating constantly. Regarding the spasmodic action of the respiratory organs, it might be remarked, that no stammerer has a normal respiration. This abnormality of action of the respiratory organs is sometimes not noticeable; sensitive and delicate instruments being required to demonstrate its presence. When speaking, we must take short and deep inhalations,



we thereupon slowly and gradually exhale. In a normally speaking person, the diaphragm rapidly descends upon inspiration, and slowly rises during expiration. This regular action of the diaphragm is interrupted by spasmodic or convulsive contraction, in almost every stammerer. As, for instance, if the stammerer is about to inhale the necessary air required for his speech, a sudden spasmodic contraction of the diaphragmatic muscles takes place, which arrests its course and holds it in the position it had taken during expiration, thereby preventing free inspiration. Sometimes, when taking a fresh supply of air, the diaphragm does not descend quickly enough, but is interrupted upon its downward course by a number of spasmodic contractions, which tend to prevent a full and satisfactory inspiration. It is often found, also, that during expiration, the diaphragm fails to properly do its function; either it rapidly contracts, and, with one muscular effort expels all the previously inhaled air, so as to leave the lungs without the necessary supply of air; or, it remains in a tight and stationary inspiratory position, the voice and articulatory organs, meanwhile, because there is no air furnished them, vainly endeavoring to do their function; or, lastly, the diaphragm, at first slowly starts to ascend, but is interrupted during its upward course by various short inspiratory and expiratory spasmodic actions of the muscles, which tend to bar the regular flow of air from passing the vocal cords. Even should the stammerer gain control over his respiratory organs, he would still have to contend with the disobedience of his voice and articulatory organs.

The closing muscles of the vocal cords are easily subjected to spasmodic contraction, which tend to press the true and the false vocal cords and the arytenoid cartilages tightly together, thereby spasmodically preventing the phonation of the vocal cords and the free passage of air. Very severe stammerers often have high-pitched voices which defect is caused by the too high tension of the vocal cords. Many stammerers are subject to

spasmodic contractions of the articulatory muscles. The above described spasmodic movements of the the respiratory and articulatory muscles are not the only involuntary muscular movements the stammerer has to contend with. In support of this fact, it must be said that the speech of every stammerer is accompanied by various so-called external manifestations. The spasmodic action of the stammerer's voice-producing organs, during respiration and articulation, unite in bringing about the most varied combinations of contortion.

There are, however, stammerers who are obliged to suffer more under respiratory contortion; others who are mainly afflicted with spasmodic action of the vocal apparatus; and finally, others who are more troubled with spasmodic action and convulsive contortion of the articulatory muscles. The above mentioned manifestations of stammering are in accordance with the individual peculiarities of the nervous system, temperament and severity of the case. These manifestations consist in contortions of the muscles of the brow, the forehead, the extremities and even the muscles of the lower body. Some stammerers, while speaking, draw and contort their facial muscles out of all semblance, in a most grotesque and awe-inspiring manner; or, they will throw their head back and forth, throw their arms wildly about them, stamp with their feet, or shake their entire body. These peculiar manifestations often increase in violence so much as to cause the stammerer, while speaking, to sway as if to fall over. It is a well known fact that most stammerers, when singing or whispering, have very little or no difficulty at all. If, however, one stammers when singing or whispering, we may know that it is a very exceptional and severe case, but may be overcome by patient and persistent treatment. The reason most persons do not stammer when whispering is, because the vocal cords are relaxed and under no tension, the voice-producing muscles are resting which serves to remove a great cause. Singing is made easy for the stammerer, because of the measured notes, also the rythmical vibrations of the vocal cords.

Stammering is caused in many ways; it is easily caused in a person who has a very hasty temper; or, who has a predisposed tendency toward stammering. Stammering is easily acquired through mimicry. It is also not very infrequently caused by fright, feverish diseases, injuries to the head, etc. Many stammerers begin to speak before they have formed a mental survey as to the sense and meaning of what they are about to express in words. It may sound incredible; but, nevertheless, it is true and not infrequently happens that the stammerer begins to talk under great difficulty, not knowing what he is about to say, and without the slightest idea what words to use. Others think with such rapidity, when speaking, that their thoughts are already dwelling upon a different subject, while their vocal organs are yet engaged upon the original subject. It is very important that this condition of mental abstraction should be overcome during treatment. Many a stammerer would be cured, were not his defect looked upon as being simply mechanical—the mental phase of his affliction being entirely overlooked.

It is a fact that among stammerers, we find by far the greater number belong to the male sex. This proportionate rate holds good for all speech defects. This may be explained by the circumstances, that the female tongue is endowed with greater flexibility, fluency and readiness of action than is that organ in the masculine sex, notwithstanding the fact that men are the stronger physically.

In connection with stammering are associated, in most cases, various manifestations of an emotional character, such as: bashfulness, timidity, depressed spirits, lack of self-confidence and lack of determination. These emotional manifestations are not the cause of stammering; instead they are gradually brought about and developed as the stammerer becomes aware of the tremendous restraint his defect exerts over him. It is also true that these emotional manifestations in return are a great reacting agency, and serve to aggravate the existing trouble. This being true, we find that many stammerers are able to speak

much better, when unobserved and alone, than when in the presence of others. When greatly agitated and under great excitement or depression, such persons are often totally unable to produce articulate and intelligible sound. This may often be noticed in persons who do not stammer, should they suddenly be confronted with anything of a humiliating, perplexing, or dangerous nature—they would, momentarily, lose control over their vocal organs, hesitate and falter. All the above-mentioned traits and manifestations of the stammerer should receive special and careful attention, in order to successfully combat with the affliction.

Among stammerers are to be found very bright and intelligent persons, with noble hearts, often misunderstood or wrongfully judged, because others are not acquainted nor familiar with their ways and actions, nor with the nature of their impediment. In the above description of stammering, we have refrained from defining the numerous names, terms, styles, etc., of stammering; but have discussed the subject under the common term, stammering. We have also endeavored to describe only the most prevalent and severe forms of stammering and stuttering.

It is an impossibility to lay down a certain and unfailing plan or process of cure for stammering that would meet every requirement of each individual case; its symptoms, cause, peculiarities, manifestations, severity and nature. Just as nearly every other disease or sickness appears and manifests itself with certain phenomena and peculiarities, differing in each separate case, so also does stammering appear with certain phenomena of speech, manifestations of a physical or mental character, etc. We will, therefore, consider only the most essential points and rules that must be followed and observed in the cure of nearly every speech impediment. Our object is to gain control over the organs which serve in the production of articulate speech. This we accomplish through a series of careful and persistent disciplinary exercises, for the purpose of gradually compelling the organs to do their



function with ease and without failure, in obedience to the speaker's wish.

When striving to overcome his trouble, the stammerer should, before all, cultivate a cheerful disposition and enter upon his task with a feeling that success must follow—providing he does his part correctly and strictly adheres to rules and instructions given. By doing this, the stammerer may cure himself entirely or may lessen the difficulty to a great extent. It must, however, be said that but very few stammerers are possessed with the necessary qualities: will-power, determination, patience and perseverance, so indispensable to a self-cure. Stammerers lacking these qualities should, by all means, strive to enter some reliable institution, where their special case would receive consideration during treatment, and which would greatly facilitate matters.

First of all it is absolutely necessary that the stammerer gain control of his respiratory organs. Therefore, he must practice respiration as it should be practiced during the act of speaking. He should take short, deep inspirations, followed by slow and gradual expiration. After gaining a certain control over the respiratory organs, in this manner, he should combine voice practice with slow expiration. Any tone or sound may be chosen for this purpose. After taking a short breath, in the manner described above, the chosen sound should be emitted in a whisper, thereupon letting the full voice follow.

There are two distinct methods of breathing,—abdominal and the thoracic. In abdominal breathing the muscles of the abdomen in connection with the diaphragm, which becomes arched during forcible inspiration, serve in the expulsion of the air from the lungs. In thoracic breathing the ribs and the walls of the chest mainly serve in the expulsion of the air from the lungs. This form of breathing practiced by women who tightly corset the waist may be called shallow breathing, as in this manner only half of the lung capacity is actually called into play, the lower part of the lungs remaining inactive and filled with stagnant air. The stammerer

should learn to master the abdominal mode of breathing before every other exercise herein mentioned, thereby gaining control over the action of the diaphragm.

Breathing exercises are not only essential in establishing fluent speech, but are also good and very beneficial to the stammerer's well-being. All the air we inhale serves to supply the blood with oxygen, without which—should it be denied us only a few minutes—we could not exist. Take these breathing exercises, if possible, only in a pure atmosphere, preferably in the open air; fill the lungs to their utmost capacity, retaining it for a few seconds until all the oxygen it contains is absorbed by the blood, then repeat the process. Care, however, should be taken by the beginner not to overdo the exercise, as it leads to dizziness and a rush of blood to the head. These breathing exercises should be indulged in daily with perfect freedom as often as desired—the oftener the better.

Breathing exercises tend to increase the expansion and activity of the lungs, the blood is furnished an abundant supply of oxygen and increases its circulation, the complexion becomes clearer, pale cheeks assume a rosy glow and the entire body becomes rejuvenated. To gain control over the vocal cords and make them subject to the will, practice persistently exercises tending to gain the end desired.

The stammerer should, after taking a deep inspiration, quietly and slowly expire, giving the articulating organs the position they would take when uttering the sound *ah*, then increase this quiet expiration gradually to a whisper, thereupon by degrees letting it assume loud and full voice. In this manner the vocal cords will approach one toward the other slowly and at varying degrees. In ordinary quiet breathing the vocal cords are wide apart; when whispering, they are in closer proximity. This exercise must be continued throughout the entire alphabet until the correct sound of every letter is completely mastered. After having mastered each letter, the stam-

merer should begin to utter simple words and syllables, gradually increasing the scope as he gains confidence by adding more and more complicated and difficult words. He should practice the last named exercise before a mirror, thereby enabling him to observe and control his articulating organs—the tongue, lips and lower jaw. When undergoing these exercises, he should constantly observe the correct mode of respiration, taking care not to inhale too much air.

Some stammerers, when about to speak, suddenly force a quantity of air out of their lungs, at the same time compressing or contracting the diaphragm and the abdomen, thereby causing, through frequent repetition of the act, very annoying pains in the abdomen, which often leaves the sufferer in an exhausted condition and great mental depression. Therefore, when undergoing breathing exercises, this condition should be prevented by constantly keeping the abdomen well out and only letting it contract in proportion to the air leaving the lungs during the act of speaking, which is gradual and slow. He should consciously utter every letter, syllable or word plainly and distinctly; only by degrees and patient perseverance will he acquire the confidence and ability to utter every word mechanically and without fear of faltering, as does a normally speaking person.

After having to a great extent mastered the correct articulation of letters, syllables and words, practice to speak short sentences, gradually increasing their length. When exercising the speaking of sentences after taking a short but deep inspiration, speak from ten to twelve words with one expiration, taking care to speak them fluently and without interruption. Learn to think clearly and mentally frame every word and sentence before articulating.

After having gained due control over his respirative and articulative organs, the stammerer may converse in a free and fluent manner as in ordinary conversation.

As every case—or nearly every case of stammering—

is acquired in early childhood, between the ages of three and eight years, parents should constantly watch their children and teach them to utter each word slowly and distinctly, thereby preventing a possible speech impediment in its very beginning. How often do we hear parents laugh and jest over the peculiar speech and mutilation of words which their child utters in its innocent or playful way, instead of correcting it and teaching it proper articulation from the very start. Beware! ere long you may regret this neglect on your part toward your child and cause it to lead a life of misery and constant humiliation in later years—you may have allowed your child to become a confirmed stammerer.

The foregoing is only the merest outline of the most essential points and rules to be followed by a stammerer seeking a cure for his affliction. Every -stammerer should, while striving to effect a self-cure, try to find out which organs are the most obstinate and stubborn in his particular case, and accordingly give special attention and exercise to those particular organs. The cure of stammering demands a great deal of determination, energy, patience and perseverance. It must, however, be said that without special aid there are very few stammerers who would be able to effect a self-cure, as nearly everyone is unable to discipline himself. The proper insight and knowledge of the correct and incorrect, normal and abnormal, function of his respiratory, vocal and articulatory organs is necessary if success is expected to crown his efforts.



## HELPFUL HINTS FOR HOME CURE

The terms stuttering and stammering once used synonymously to designate nearly every kind of defective speech, outside that of lisping, have, of late, for scientific purposes, become divorced, and the stutterer is now distinguished from the stammerer by the rapid repetition of the initial consonant of the word he is trying to speak. Thus Charles Lamb stuttered, when he spoke of the Duke of Cumberland as the Duke of Cu-Cumberland, and when being interviewed by a very boorish individual, who blurted out, "I should have known you, Mr. Lamb, by your stuttering," he rather astonished him by replying, "Oh, th-th-that's not me-me-me, th-th-that's my b-b-brother."

In stammering, on the other hand, the jaw becomes rigid, while the muscles of the face twitch spasmodically—even the eyes taking part in the convulsions; but no sound is emitted until the glottis is at length forced open, and the words shot forth, similar to the way water is discharged from a bottle, if the latter be held upside down.

Sometimes the two afflictions co-exist side by side, which complicates the case, and renders it correspondingly difficult of treatment.

Some maintain that stammering is the effect of stuttering, but this, I am inclined to doubt; though it is very obvious, stuttering may—and, indeed often does—drift into stammering. On the whole, the former is a physical habit, while the latter is chiefly psychical. The stammerer sees several words ahead of the one he is going to stumble at—possibly a compound such as *str*—it is pictured on his vivid imagination, and he searches quickly for a synonym. This gives him an appearance of indecision, and an air of flightiness. At another time the same word

will give him no occasion for concern, nor for that matter will any word, when he is alone; for he will read aloud to himself, or address an imaginary audience, without the slightest hesitation in his speech; but let him become conscious of another person listening, though it may be in the adjoining room, and it is certain he will stammer on the spot. This proves, beyond a doubt, that what at first was a physical habit has at length become mental.

Not until within comparatively late years, have hopes of anything like a rational treatment and permanent cure been held out to the helpless sufferer from this distressing malady.

The secret of one good system—if secret existed—was to teach the stammerer to speak consciously, as other people speak unconsciously, and thus conquer nature by obeying her, for though to be conscious of the cause of every articulate sound which is made, even in a short sentence, is a physical impossibility, yet a general watchfulness and attention to certain broad rules, enables nature to accomplish results.

To say that want of intelligence is the cause of stammering, is to show a lamentable lack of it, or else supreme ignorance of history on the part of the asserter. Doubtless, a boy may be dull and volatile, and a stammerer likewise; but *post hoc* is not always *propter hoc* here; for more often he shoots ahead of his fellows, when once he regains fluent speech. I make bold to assert that the brain of the stammerer is inferentially of finer texture than the average, which very fact makes him more susceptible to the malady, not to mention Demosthenes and the ancients, but to come down to the times of men still living. Curran, the Irish orator; Charles Lamb, the charming essayist; Martin Tupper, the poet; Charles Kingsley, preacher, reformer and poet, and others I could mention, eminent in literature, statesmanship and divinity—some of whom were under Hunt's treatment, contemporaneously with myself—have all been thus afflicted.

The fact is, the stuttering child is sent away to school

before he has yet learned to talk correctly; is it little wonder, therefore, that with his mind diverted from his work by his affliction, and the cruel working of thoughtless schoolmates, with the vital fluid, that should go to build up and nourish the boy, used up in the miserable spasms of misarticulation, is it any wonder, I ask, that both body and mind should become to a certain degree stunted in growth?

The amount of ignorance with regard to the treatment of stammering existing, even among well informed people, is amazing. Children are told, "You can help it if you like. You do it on purpose," as if they were not writhing with shame every time they open their mouths. As if it was not torture enough to see the rest of the world walking along a road which they cannot find, and are laughed at for not finding, while those who walk proudly along cannot tell how they themselves keep on it. It was said of the writer's defect, when a youth, by a pert miss, "I believe it is simply affectation." Little did she know of the agony such affectation cost him—if she had known, she would have sympathized more and criticised less.

The situation in which a stammerer sometimes finds himself placed, would be truly ludicrous, if it were not so painful. M. Colombat tells of two of his pupils, who left the institute one day for a stroll together along the boulevard. Seeing a tobacconist's shop, they stepped in to procure some cigars. The one desiring the cigars, in asking for them, began to stutter. It so happened that the tobacconist himself, was also a stutterer, and finding a friend in affliction, commenced sympathizing with him. This led to the other pupil's joining in, and the trio were stuttering together. Now the worthy store-keeper, wholly unprepared for this additional recruit, naturally inferred the two had come for the sole purpose of "guying" him. Seizing a cane, he was about to belabor them heartily, when fortunately Colombat, or some one from the institute, happened by, and, seeing the dilemma, explained matters.

I remember myself once calling on an English Bishop, (lately deceased), with regard to the ordination of a young friend. I approached the palace with no little trepidation and rang the bell, which seemed to toll out loud as the bell of his great cathedral near by. A liveried footman answered the summons, and for the life of me I could not say "Is the Bishop within?" The contortions of my face were doubtless frightful. As I recall the interview now, I can see the flunkey turning his head rapidly from side to side, to avoid exploding with laughter in my very face. This did not mend matters. Finally I articulated something and sent in my card. I was informed his lordship would be at liberty in an hour. I walked away mortified and dejected. The more I reflected on it the more chagrined and mad with myself I became. This pique so braced me that on my return I spoke without hesitation; and the Bishop never knew from that day to this, that he had been holding quite a lengthy conversation, giving and taking, with a severe stammerer, who, an hour before, could not control his speech organs sufficiently to inquire if he, the Bishop, were at home.

Charles Kingsley told a friend of the writer's that, when commanded to preach before the Queen and the Prince Consort,—which command, as one of H. M. chaplains, he was at any time liable to receive,—he was usually thrown into great consternation until eventually the mental stimulus—for it would never do to stutter before the Queen—carried him successfully through.

All this goes to prove that stammering is due to a temporary loss of mental control, and consequently the control of those organs governed by the mind; and further, that under certain conditions of excitement, the will regains its power of control though the strain is apt to be followed by a rebound when the excitement is over—leaving the subject in a worse condition than before. The stimulus is the same that enables an actor to play better to a crowded house.

How, then, can we reach the present seat of the trouble?



By seeking the point where the physical habit was first induced; by teaching the patient the true art of speaking, and to this end bring his will-power to our aid. We all know the power exercised by the mind over the body, and the converse, and the knowledge of this interaction we must diligently use, if we be successful.

Volition—like attention, concentration, and other mental habits—is capable of cultivation, and this must needs be impressed on the mind of the stammerer. As theologians speak of the expulsive power of a new affection in the religious world, so also may we speak with equal truth of the expulsive power of a new affection, in the domain of defective speech. The sufferer should acquire, therefore, the habit of willing strongly, energy—a purpose once formed and then death or victory!"

Having given the mind its due place as the exciting cause of stammering, we will proceed to examine the physical aspect of the latter, and its primary or proximate cause.

The man learned to stammer when a child, as others learned to speak plainly, by unconcious imitation. The child, of course, must have been much in the company of a stammerer at this tender age. Doubtless the normal speaking of others would have counteracted the habit, but for a predisposition which made the habit, once acquired, too strong for the child to break away from by its own efforts. A little help and care at this time, might save years of suffering. Predisposing causes would be a disturbance of the nervous system, or the lowering of vitality caused by many of the diseases incidental to childhood. And I may say right here, parents and teachers of children, cannot be too careful in speaking before the very young, not alone in subject matter, but also in manner of saying it; ready to correct in them any hesitation, or little lisp which now sounds so pretty, making the child speak slowly after them, that it may catch their clear and deliberate articulation, and thus check an incipient stammer from growing into a defect, which may mean for the sufferer a life's agony and a life's failure.

Want of coördination, of harmonious working together of the organs of articulation with those of vocalization, is the proximate cause of stammering. In singing, intoning and rhythmical speaking—where the breathing is regular, and the flow of sound is sustained—the affliction is rarely to be detected; but in the abrupt transition which occurs in ordinary converse, the two sets of organs become, to use a hackneyed simile, like a balky team, do not work together, refusing to respond to the will, the energies of which become entirely dissipated through over-anxiety, or the fear of looking ridiculous. To restore this harmony, must be the aim of all rational treatment. To expect to cure a confirmed stammerer (I use the term in its broad sense, as comprising both the stutterer and stammerer,) by following a set of written rules is, I apprehend, chimerical; though much relief may be obtained by the exercise of the reasoning faculties and volition. The fact is, the idiosyncracies of the patient must be studied. It is impossible, therefore, to lay down rules which will meet every case. I recommend, therefore, at whatever cost, and without loss of time, that the stammerer place himself under treatment in an institution where his particular case will receive the needed attention. He will there gain that confidence in his ability to talk, which is, in itself, more than half the battle. Nevertheless, until he can do this, by reading and following the hints he will find in books published on this subject, he may with watchfulness and attention, cure himself.

The fact that he can sing before others, or speak plainly when alone, demonstrates he has no organic defect. Why, therefore, cannot he speak as correctly on all occasions? Some would answer, that his failure is because of nervousness, and they are right in a measure, but though all stammerers are nervous, the converse, it is plain, does not hold good, that all nervous people stammer. The fact is, that this nervousness, now the effect of stammering, has become, in a great measure, the cause also.

In normal speech, the brain intimates the command,

when the organs of voice and speech immediately and automatically respond. With the stammerer, however, the case is different. Long misuse of the organs has so impressed the habit on the brain, that under certain conditions—fear, shame, or over-eagerness—his very thoughts are cast in a stammering mould. The mind suggests the halting word, and the physical apparatus can respond with no other. He should be trained by vocal and other exercises, to picture forth the correct word, and the organ will at length automatically respond with it.

In the face of this discordant state of the nervous system, it is, perhaps, as well not to scare the sufferer by flashing before him all the delicate mechanism set at work by the will in the production of voice and speech. It should suffice to explain to him simply, that sound is produced by sending a column of air from the lungs up through the trachea (windpipe) into the larynx—the cartilaginous box situated at the top of the windpipe, the front of which is that protuberance in the throat commonly known as “Adam’s apple”—to be vibrated by the vocal cords on either side of the glottis into tone, similar to that tone, which is produced by the vibrations of the strings of a violin or harp, but infinitely more delicate in modulation, as the instrument itself is more wonderful in construction.

The sounds which primitive man imitated from nature in the infancy of the race, such as the cry of animals, the sighing of the wind, and the rush of water—much as children imitate the evolutionized words of their parents to-day—were the beginning of language. As the needs became greater, more defined word-signs became necessary, and these vocal sounds were gradually modified by the action of the soft-palate, the tongue, the lips and the teeth into the conventional speech of today. It is a fact that the tongue has little to do with speech, however much it may have to do with misarticulation, for well authenticated cases have occurred where speech was but little affected by the removing of that much maligned member. This by way of parenthesis.

Now, to bring these interdependent organs of voice and speech into harmonious subordination to the will, after the long revolt caused by stammering, constant and painstaking exercises are, of course, necessary. Let the pupil learn first to breathe correctly—though faulty breathing is an effect of stammering as well as a cause, like nervousness, yet this practice will not only strengthen the muscles of respiration—which are sure to be weak in his case—but will conduce greatly to his general health. Therefore, in his walks, he should exercise in long and short breathing. By long breathing, I mean a steady, deep inspiration, filling the lungs to their full capacity, at the same time pressing the diaphragm firmly with the tips of the fingers, then slowly exhale. After practising this for some ten minutes, take a succession of short inspirations until the chest is fully expanded; then expire in like manner. This pressing on the diaphragm gives the conscious use of this important muscle, which is the very bellows of the lungs, tending to bring it more under the control of the will. The energetic contraction of the diaphragm is necessary to firm, clear and resonant sound; strengthen it, and the other muscles of the chest and torso, by all manly exercises. Hard riding and rowing are good exercises for expanding the lungs and oxygenating the blood; while boxing and fencing are invaluable; for, besides bringing every muscle into play, they will teach the stammerer the habit of looking a man squarely in the face, a thing few stammerers are able to do. Breasting the bar is a good exercise for strengthening the diaphragm and abdominal muscles, besides the muscles of the neck, all of which are used in powerful speaking. Should he not belong to a gymnasium, he can readily improvise a horizontal bar—which should be fixed high enough from the ground, so that he may hang by the hands without other support. Springing up, let him seize the bar with the palms of his hands, towards him, and draw himself up until he can look over the bar, afterwards letting himself down to the full length of his arms, with-



out suffering his feet to touch the ground. After he has done this a few times, he will become aware of this weak spot by a peculiar sensation in the region of the diaphragm.

Though talking with the teeth closed has been recommended by some, I doubt whether it can be practiced by all with impunity; and for the following reasons: First, it is a trick, and like all tricks which are opposed to the normal use of the articulating apparatus, it is liable to lead to a reaction when its novelty has worn away. Secondly, there is a danger of its leading to a stammer of the jaw—that frightful lockjaw—which is one of the worst forms of stammering. On the other hand, I would recommend, rather, an exaggerated use of the jaw, especially when reading aloud, as helping to strengthen the jaw muscles, and at the same time giving the vowel sound—which should be full and round from the bottom of a full lung—a chance for free emission. The jaw should be as “free and strong as when he is masticating his dinner.” Let him study, say the plays of Shakespearē, and read aloud from them daily, with tight upper-lip, and loose, flexible lower jaw; taking a full breath at the commencement of each sentence, and sounding well the final consonant of each word, keeping up the stream of sound, and pressing the diaphragm, whilst holding the body perfectly upright. It is good practice for the articulating organs and the breath, to vary the vocal reading with loud whispering—which is simply articulated breath, in the place of articulated voice. The trend of this is to quicken the patient’s insight into the formation of the consonants, while the exercise can be indulged in with comparative silence. When speaking to others, he should avoid all haste, even pardonable eagerness, throwing into the stream of sound a slight musical intonation, at the same time looking his auditor squarely in the face.

I remarked, “with tight upper-lip;” this will give him command of that restive organ—which he finds ever ready to fly into a spasmodic flutter, as well as of those

muscles of the throat and face, with which it is so intimately connected. If he doubt this, let him strip his shirt collar down and lay bare his throat, then tighten his upper lip against his teeth (hiding the red). Note how the muscles on both sides of his neck will immediately fly out in response.

The stammerer should endeavor to cultivate Goldsmith's happy knack of "hoping," that his cure is not impossible, but certain, if he sufficiently desires it. He should avoid brooding on his defect, for this destroys energy and weakens self-control. Morbid self-introspection should be eschewed, and the mind lifted off selfishness and self-seeking, by keeping it and the body usefully employed: "for whensoever he begins thinking about himself he will surely find the dumb-devil of stammering close at his elbow. He should rigidly eschew all evil imaginations and base habits, which tend to perturbation of the mind. Temperance, both in eating and drinking, is essential, and whosoever may use tobacco with impunity, the stammerer can not—it affects the brain and nerve centers too mischievously. It will be seen, therefore, that in order to bring the nerves and muscles under the dominion of the will, the first and nearest duty of the afflicted one, above all men, is to cultivate the *mentem sanam in corpore sano*. To this end he should rigidly eschew all hot slops and cold ices, and every indulgence which will injure his wind and his digestion. He should study and strive, as far as possible, to obey those laws of health, which are the laws of nature, which are the laws of God." Finally, to follow Kingsley's advice, "Let him learn again the art of speaking, and having learned, think before he speaks, and say his say calmly and with self-respect, as a man who does not talk at random and has a right to a courteous answer. Let him fix in his mind, that there is nothing on earth to be ashamed of, save doing wrong, and no being to be feared, save Almighty God; and so go on making the best of the body and soul, which heaven has given him, and I will warrant him that, in a few months, his old bad habits of stammering will lie

behind him like an ugly and all but impossible dream, when one awakes in the morning."

## A LAY SERMON

"And they bring unto Him one that was deaf, and had an impediment in his speech, and they beseech Him to put His hand upon him. And He took him aside from the multitude, and put His fingers into his ears, and He spit, and touched his tongue; and looking up to Heaven, He sighed, and saith unto him, Ephphatha, that is, Be opened. And straightway his ears were opened, and the string of his tongue was loosed, and he spake plain."—*Mark VII; 32-35.*

The blind, deaf, dumb, lame and diseased of the present day, worn and discouraged after years of effort and expenditure, hopeless of securing deliverance from the bondage of their infirmities, look backward with longing eyes to the simplicity and instantaneousness of cure described in the New Testament.

It is not an evidence of ignorant credulity to accept the instances of direct and instantaneous healing which the records of the past present, and which occur even in our own day. To the thoughtful and enlightened mind, these occurrences sometimes denominated miraculous, are proof of the supremacy of the higher forces, will, intellect, faith and love; light, health, freedom and life. One sect among us does well to especially advocate this truth. But let the Christian Scientist not forget that this view is held no less nobly and consistently by those whose lives are spent in painstaking study of the construction and composition of the human frame, and the effect of certain substances and conditions introduced when an abnormal state exists. Hospital and asylum; scientist, surgeon, physician and nurse; catnip tea and quinine—all these are manifestations of the power which makes for health and sanity as well as for righteousness.

"Nature hates peeping," Emerson tells us, yet why are her children born with such an insatiable desire to know to the utmost her secrets? "If a man should consider the nicety of the passage of a piece of bread down his throat, he would starve." True, doubtless; yet to make sure that this passage of bread does not remain a secret, mysterious process, it is sometimes obstructed and suffering ensues; Nature's manner of calling her children to closer acquaintance and friendship, for she would have us to be, not merely blind recipients of benefits, but men and women understanding and appreciating her gifts. It was not meant that this journey of life should be made with the least possible amount of trouble to ourselves, but that each step should be, in a measure, understood, and no by-path left unexplored or mountain of difficulty unascended. Not that we should go out of our way. For many the path leads straight onward, and given a plain duty, it is folly to turn aside in order to gratify mere idle curiosity. But if a man halt in his walk, speech, or digestion, in his thinking or living, let him know that Nature is whispering, "Understand me."

In an enumeration of the many ills to which flesh (and mind) are heir, stammering should have no unimportant place. Often referred to jokingly, it is, in reality, a serious affliction, affecting the physical, mental, and moral life of the sufferer. The physical life—for the unnatural effort necessary to speech perverts the nervous force, in severe cases weakening and deranging the entire system. The mental life—because speech is so truly the other half of thought, that, denied adequate natural expression, the mind ceases its healthful working, and clearness and exactness of thought grow difficult. The moral life—for the almost inevitable despondency and loss of ambition attending the disease—weaken character, and the lack of healthful and rational intercourse with one's fellows, tends to harden and embitter the soul. The looker-on at life sees the faults of others, and often his own also, through a microscope.



If speech were not entirely natural to man, it would be the most difficult process in the world to acquire. The child does, indeed, learn to talk, yet it is not external accomplishment grafted into the life, but a natural activity of the body. Helen Keller, to whose brain no spoken word can penetrate, and whose eyes witness no movement of tongue or lips, can speak with sufficient plainness to be readily understood, thus demonstrating the inherent character of our language, for even to her educated sense of touch the complicated series of movements cannot be wholly apparent. The body possesses a wisdom of its own, or has other guidance than that which we consciously exercise.

Many a stammerer is much better acquainted with the principles governing speech, than is his neighbor with ready command of voice and articulation. He studies this wonderful and intricate function, finding it to be in a sense involuntary, for we, by no means consciously, superintend each action, but wishing to communicate with those about us, are served by numerous agencies, each performing its part readily and correctly, thus leaving the mind free to consider the subject of its discourse. The mechanism concerned in speech, together with its action, is comparatively well understood. The air, expelled from the lungs, is changed to vocal sound in the larynx. The desire to speak is accompanied by greatly increased tension of the vocal cords, whose rapid vibrations are communicated to the column of air, thus producing sound. This raw material of speech is further modified, as it is acted upon by the muscles of the throat, and, reaching the mouth, receives impressions from tongue, teeth and lips, these completing the transformation of mere windy breath to man's most potent weapon for good, or ill.

Why does a man stammer? The natural inference is that some fault exists in the mechanism, yet by good authority we are informed that seldom, if ever, is the difficulty the result of wrongly-formed organs of speech. Let us, without for the moment endeavoring to find a cause,

consider the visible aspect of the trouble. Stammering seems but a slight and almost needless disease to one acquainted with the manner in which the organs deport themselves: simply a cleaving of the tongue to the roof of the mouth, or temporary inability to open the lips or teeth, resulting in the prolongation of the opening sound of a word, or, it may be, that sound is completely obstructed in the case of the word desired; though a sudden veering to a totally dissimilar word will cause the tone to flow readily. In stuttering, there is manifested a rapid repetition of one word or syllable. In all cases there is spasmodic action of the organs of speech. Where the difficulty is of long standing, it becomes complicated, the sufferer, in uttering a word, often interposing various meaningless sounds, continuing his efforts until breath is exhausted, when, perhaps, the word slips out in the gasping, scraping tone much like that given forth by a violin when the player loses control of the bow.

So much for the obvious facts of the disease. The stammerer, however, has observed other phenomena, which, if he is psychologically inclined, awaken intense interest. He does not always stammer. When alone, he can usually read or speak without trouble. In conversation he can, perhaps, turn from a word which presents insurmountable obstacles, and rapidly and readily interject an excuse, or explanation of his difficulty. The story is well known of the stammerer, who, after several ineffectual attempts to direct a traveler who inquired of him the way, burst forth, "Oh, go along; you'll get there before I can tell you!" Then, too, he can swear readily. Words which present the greatest difficulty at times can, under other circumstances, be spoken without hesitation. The condition of their ready utterance seems to be a withdrawing of the too anxious direction of the speaker. If he can completely forget himself, he is safe. To forcibly, and somewhat humorously, illustrate this fact: A friend had been spending the day in a neighboring town. Upon his return he was interrogated by our stammerer in

regard to the family of a relative. "Are they—" here trouble commenced; the word "well" could not be spoken. After several trials, all failing to bring forth the word without a prolonging of the first sound, the stammerer suddenly ejaculated, "Well!" not by any means as a completion of the question, but as an exclamation of impatience, after which he resumed his effort, not realizing until his friend broke into hearty laughter, that quite unconsciously he had, without hesitation, spoken the difficult word.

The stammerer stands in his own light. Let him step aside, let the attention be directed to another matter, and speech flows easily. The body appears able to manage very well without its timid, bungling occupant. The musician may have noted this fact in connection with performance without notes. The conscious mind, looking ahead, is not able to place in position the myriad notes, but if the performer be not too greatly concerned, his fingers will carry him safely through.

Are we any nearer an answer to our question. Why does a man stammer? We find that he can, as a rule, sing, read in concert with others, and at times speak without difficulty, thus proving the healthfulness of the vocal apparatus. Accustomed as he is to classing himself with Moses, Demosthenes, Charles Lamb and Canon Kingsley, he by no means attributes his difficulty to lack of intelligence. Is he deficient in will-power? This view is untenable in face of the facts that speech is easiest when there is, apparently, the least exercise of will-power, and that with greater effort the difficulty increases.

It is fortunate for the stammerer that his cure does not depend upon a complete understanding of the disease. Forms of words may, indeed, serve the purpose of an explanation, but several profound problems respecting mind and matter will need solution before the precise nature of the impediment can be determined. Nature leads us on, granting bewildering glimpses of mysteries beyond,

and we seem almost to have grasped her essence; but always she eludes our touch. Never will she completely surrender. Watch the prestidigitator as closely as we may, the decisive act escapes us, and, in the method of nature, from the growing of a plant to the growing of a soul, though we watch unceasingly, there are movements our eyes can not see, and sounds our ears can not catch.

Though so reticent, nature serves us faithfully. Trust her fully, and the reward is great. What we cannot do ourselves she does for us, knitting together the broken bone, healing the bruised flesh, and can we not say also, setting free the obstructed speech? If, indeed, as has been said,\* and the explanation is the most intelligible offered, stammering is caused by a too great sensibility of that portion of the brain governing speech, this weaker part being easily disarranged, resulting in spasmodic action of the organs under its control, it follows that relief cannot be obtained by a still further concentration of nervous force where there is already an excess, but rather by a diversion of this energy to other channels; or, in other words, by giving responsibility to a different portion of the brain. This is the principle, recognized or unrecognized, acted upon in many methods of cure. Nature, given an opportunity, does her work perfectly, and the cure wrought instantaneously centuries ago, may to-day be more slowly, though no less divinely accomplished.

This article is designed to throw some light upon an obscure subject, to give the stammerer a clearer idea of the nature of his difficulty, and to indicate the lines along which help will come. Let him remember that in a hand-to-hand struggle (without aid) with the infirmity, he will, in all probability, be defeated. Exercise of will-power is, indeed, necessary, yet more to keep him in the path where he will not meet the enemy, than to enable him to overcome with great effort each dangerous word on its own ground.

\*The Origin and Treatment of Stammering.—*Lewis*.



Patience, careful study, patience, faith, patience, persistence, and again patience. If even then success does not come, seek institutional help.

“God doth not need  
Either man’s work, or his own gifts; who best  
Bear his mild yoke, they serve him best; his state  
Is kingly; thousands at his bidding speed,  
And post o’er land and ocean without rest;  
They also serve who only stand and wait.”

## ENCOURAGEMENT FOR STAMMERERS

Stammering though a disease, is partially a habit; a disease, in that the nerve centers become alarmed and congested without a tangible cause. The disturbance causes an accelerated and rapid action of the heart and induces spasmodic respiration and a general convulsive movement of the diaphragm and produces derangement; the circulation and respiration equally affecting the action of the other. A habit, in that the stammerer does not sufficiently articulate and pronounce his consonants when not laboring under embarrassment and nervo-agitation. A disease, in that stammering goes on consciously and unconsciously when the trouble can be partially controlled by the exercise of judgment and special care. This and laxness of articulation is doubly injurious when so much depends upon perfect performance to insure harmony and unimpeded fluency.

It may be well to note that few people stammer when thrilled or aroused, more particularly when making appeals in public places and when masters of the situation. Under these conditions, the speaker has control and command of all his faculties, both mental and physical. He then has sufficient stimulus to overcome his faltering spirit and to forget that he ever was a stammerer—the condition we hope ultimately to reach and so very difficult to

obtain. As a writer on the subject recently said, "there is an insufficiency of the will and united purpose, which is necessary for the impartation of distinct, concise and complete thought. If the body is not under the control of the will, the brain may convulse and move faster than the tongue can perform. It may also act incoherently and without method. This disarranges vocalization immeasurably and is the source of much inharmony between the two great factors." When one knows he would not be seriously afflicted if he could forget he ever was a stammerer why does he not make more material progress? That is a question which can be only partially answered. First, the stammerer stammers without volition and unconsciously, and occasionally dreams and thinks with the same halting vocabulary. Second, the semi-voluntary muscles can only be partially directed when conditions are favorable; when unfavorable, and surcharged by electrical force, these muscles are unmanageable.

I beg of my readers to make a study of self, and while listening to my suggestions and research, consider to what extent these remarks are applicable. What may be beneficial to one and true in principle is only true in part with another. None but advanced stammerers, and those versed in dealing with the subject, can fully comprehend the limitless task and successful application of well-known truths which are paramount. The stammerer must correct improper muscular movements and take notice when any organ fails to perform its proper function.

While I may not be accurate in details, general principles are best discussed with authenticity and intelligence, and will serve us better purpose. In many cases there is a lack of harmony between the upper and lower respiratory muscles. While undue force is always to be avoided, convulsive diaphragmatic action is doubly injurious. The ultimate result is the closing of the air passage by one or more of the vocal organs in their unequal effort to economize and vocalize the breath; or, perhaps, the tongue

may not be in proper position and no control exercised over the air column at all. Some claim that the muscles of the face are not all the proper length, and when the jaw reaches a certain angle, it has a tendency to act with epilepsy. No matter from what specific cause, disastrous results prevail in one or all its various forms.

In cases advanced toward recovery, the vocal organs are in position, and remain so and perform their functions when the individual maintains his equanimity. Should he fail to preserve it, disorder prevails, complications arise and he again experiences the suffering of his less fortunate brother.

When speech is fluent and performed with ease, the air column is broken into small fragments; each distinct phonetic sound and vocalization, other than the vowel sounds arrest the rapid escape of the column of air. It sometimes happens that a sufferer is left breathless without power of utterance, and his message not half delivered. The stammerer must learn to breathe slowly, inhale and exhale slowly and control the breath. He must at all times inhale a sufficient amount of oxygen to aerate the blood and keep the lungs free from an excessive amount of carbonic acid gas. A failure to do so not only immediately causes mental depression but robs the man-physical, of inherent power as well. No better plan can be devised to drive away impending stammering than to combat the nervous sensation by deep and complete respiration, thus furnishing ample regime and forestalling the temporary failure and hesitancy to respire, and spasmodic respiration known to all who have once stammered. The pulsations of the heart must be regular and normally strong. Not only must the breathing be guided, but equal care should be taken to keep the tongue in position, well forward and it should be the only organ which may, if any at all, impede the flow from the lungs. Great care should be taken to pronounce all phonetical sounds with mathematical accuracy and intelligent precision. The

mind and will should not be forgotten in our mechanical appliances and constitutional devices.

The greatest difficulty to be met is, how to overcome the nervous complications which so harass the pupil and baffle so large a majority. To accomplish the result so vitally sought, is a precarious undertaking even for one competent in his craft. With diligence and tact, he will exact obedience from the pupil, who has made advancement and has substantial hopes for complete relief.

Total recovery is given the fortunate who, with persistence, have more than conquered themselves. Invariably the stammerer does not know what will assist him; but he must assist himself, for with him alone lies the power to overcome all that binds. Nothing but an extended competent practice upon the deficient elements necessary to successful speaking, will afford complete immunity from the nervous complications, and build up and strengthen the weaker parts.

The mental phase of the trouble is even more difficult to treat. No approximate idea of the extent of the difficulty can be made on account of the mental conditions which enter in and must be considered when the difficulty is treated. It may be considered a form and part of the disorder itself. The object to be attained is unity of action between mind and body, and a healthy sufficiency of the will. There is an inability to relax, when undue tension is drawn, as well as an inability to make the body elastic and firm. Acute stammering is always a convulsive effort to vocalize, while the pressure from the lungs is too strong to allow vocalization of the air volume during its rapid expulsion therefrom. If the abnormal pressure is removed perfect vocal performance will be an accomplished fact. More stammering is caused by the lungs being excessively expanded than by comparative exhaustion of the volume. The lungs may be well filled and the next instant exhausted through the same inability to economize. Under embarrassing circumstances the lungs may be compressed with carbonic acid and the unfortunate



one suffer for the want of oxygen. Should he have sufficient presence of mind to stop speaking long enough to expel the devitalized air, he will not only remove the congestion, but will supply the oxygen which is so much needed to secure composure and strength sufficient to overcome the existing mental and physical observant conditions.

As to how relief may be best obtained, I am most at sea, and go groveling among the wheat and tares, occasionally finding a golden grain more perfect than the others. It can only be obtained by means external. The mental and physical man must act in unison. The body must act with mechanical precision and mathematical perfection predestined by the Omnipotent Supreme. We must reason from the depths of our souls and build from cause to effect. The mind must be trained to think in words and in a straight line, oblivious of latent physical defects sought to be overcome. Even his individuality itself should be forgotten at times. This is the most cherished of results sought to be attained. Then successful speaking will be an assured fact and the trouble reduced to a minimum. The mechanical part of the impediment must be mastered by continual application of forces, mental and mechanical, until weakened parts are made strong and normal, and right speaking is habitual. It is successfully overcome when the nervous sensation immediately preceding stammering is no longer violent, if present at all, and the conditions which produce the same do not affect the individual consciously or unconsciously. The intellect must be controlled by the will, and the will must be sufficient to subject the body to control and dictation without undue effort. The condition of the mind yields so great an influence upon the physical man that we have reason to believe this malady, if it can be called a malady, is largely due to morbid influences existing paramount with the individual and may be a part of his individuality. A certain amount of it exists without cause.

The stammerer must be trained organically until the physical movements are true to nature, perfect and automatic in performance.

When this is once successfully accomplished, all that is needed to perfect a permanent cure is to supply confidence in self and overcome the depression in body and spirit and to make them remain actively in force for all time to come. He should refrain from speaking, when speaking can be avoided, should he feel the disorder coming. It is better for him not to speak at all when he has no message to impart. He should talk no faster than he can speak distinctly and accurately and his hearers understand and digest. This materially assists him in establishing between himself and others that magnetic reciprocity of interest which exists where mind meets mind. He then speaks with sufficient force to utilize all his nervous energy and builds up the weaker parts. And while the occasion dominates the force required, there is present that mutual reflex agency which affords him ample protection against himself. (This throws some light upon a seeming mystery why a stammerer may make an eloquent argument upon the platform or to a jury.) When speaking to anyone, he should speak to him face to face, look him in the eye and hold it until the request is made or message delivered, as the case may be. It relieves the diseased parts of excessive nervous stimulus and promotes composure. It also supplies strength when and where most needed. It might be well for the stammerer to carry on his desultory conversation under actual and impending dangers, rather than with those before whom he wishes to create a reasonably favorable impression. It will be profitable for him to move among people, and be present in public places and accustom himself to give and receive the attention due from one stranger to another and to society in general. He should think not of what words he will use, neither in what manner he will speak, unless he is an inveterate stammerer seeking light, but should verily believe that he has something in mind that he

wants others to hear. Society should be sought instead of being avoided. While remaining silent at times may be wise, and though the avoidance of public places may relieve inevitable embarrassment, relief is only secure when the presence of others does not embarrass or disturb.

When you are addressed, meet the gaze of your inquisitor quietly and firmly, with a steadfast resolution that you will not stammer again. Should the sensation peculiar to a stammerer come upon you, use the best device at your command to drive it off. It invariably assists in relaxing nervous tension and induces speaking with a purpose. If the purpose is great enough, you will rise above it. These remarks are cursory at best, and for the purpose of application are written for those who have advanced from slavery to comparative freedom. It would be far better for one who is an inveterate stammerer not to attempt wholly alone to effect a cure. The great tendency is to fall into errors hard to dispel and signally bad. Competent assistance can supply him with the required confidence necessary to speed recovery, and is best known to those who have experienced the merits and demerits taught them with some little success. The best results are obtained in all things at relative cost.

Nothing will be more conducive to complete relief than right living, right thinking and right acting. Morality, sobriety and mental and physical activity. While as stated complete and permanent relief is next to impossible without the presence of one competent to instruct, and zealous in his efforts to demonstrate the practicability of his teachings, much may be accomplished alone. As one cause of relapse is a failure to keep and perform practice of the elements necessary for recovery, a teacher is invaluable in compelling his pupil to correctly and faithfully follow certain physical and mental mechanics, and to improve the advantage when once gained. The stammerer must work, strive and use all means within his power to achieve success. He should study self and note advancement or vantage lost. He should make his surroundings pleasant

and avoid subjects personally depressing to him. His instructor should, as far as possible, remove from him the many besetting elements which combine to make discouragement at commencement so nearly unavoidable. His friends should differentiate between wholesome encouragement and conventional sympathy.

The nervous part of stammering is the greater trouble to be met and conquered. It has confounded doctors and educators for thousands of years and still continues to baffle some. It is evident that when one can talk with little or no impediment when alone, and stammers when another enters, that some nervous trouble intervenes and is present. The first question which presents itself is, what cause can be assigned and what is the pathological effect? Certainly there is a power which intervenes and destroys natural breathing and vocalizing. If it is disease alone, relief can only be obtained by patient effort, but if mental, the malady will be overcome speedily or be prolonged according to the temperament of the individual.

The modern system, based upon education, principally, has its efficacy in directing the electrical current to another part of the body; thus relieving the affected parts and giving a mental tonic. This reflex action gives relief and assurance of complete and permanent cure. The body is relaxed and normal conditions prevail; the mental conditions are hopeful, and were the stammerer now taught that confidence is a wholesome factor, (more of a means than an end), the result might be more satisfactory. To afford permanent relief the affected parts, which are weak if not deranged, must be trained to act correctly and by judicious use will, in time, have proper strength. The weakness may be physical or otherwise, usually both. Habitual lax and improper vocalization must be overcome and made relatively perfect until correct speaking and economy of volume is scrupulously habitual and breathing equally as perfect.

Do not hesitate to use time and rhythm where such will be helpful, no matter the pathological base.



When the mind is occupied in absorbing thought, speaking is automatic with the calculations devised by the brain. If the sufferer is depressed, depressed speech will be the result. It is fortunate that stammering is part mental. Were it not so, relief would be much more hopeless. When the soul forgets that its "shroud" was once a stammerer, the infirmity will have ceased.

Let me not discourage any stammerer nor offend him in any way, for now, with greater enlightenment than was mine in my unequal struggle, he can receive the substantial assistance that has been denied many a one. He can profit by the intelligent labors of others. While others may assist him, he alone must effect his own cure. It can be obtained only after a continued and patient effort. The effort must be with method and upon pathological and physiological lines. When in possession of a system which affords relief, never weaken in the use of it. Speak slowly, distinctly and with reasonable force. While you may have stammered for years, and while stammering has become a part of your very being, more than a mannerism with you, you may reasonably hope for relief even now. No specific rules can be offered; for what may be offered to one may apply only in part to another. Great care must be taken not to distort that which is already not without blemish. Something must be done to quiet and strengthen the nerves as well as the vocal organs. Place yourself under the care of skillful instructors in some of our best and most reliable institutes, and with persistence and fidelity follow their instructions and regime. Do not consider your time valuable; you cannot be cured in a day. Time spent in any institution, where learning and method are taught, is vastly more valuable than cumbersome treasure. After you have been pronounced cured and find your life doubly enlarged, and happiness all that you dreamed, stay some days longer and entrench yourself in your success. A lurking germ may still be with you, lying dormant, ready to rise when you through necessity relax your

vigilance. When you enter the "lists" to combat the problems common to all mankind, barring the few, mother tongue performs an active part. Should you not be able to avail yourself of the benefit of competent "coach," make use of the material you can command. Make home pleasant; but not to such an extent as to preclude the other members of the family from being watchful and from giving you timely warning. By doing as suggested much stammering and suffering may be avoided and permanent relief afforded.

Cultivate persistent energy and do not abate active mental and physical discipline. When not obligatory to speak, unless well advanced or during judicious practice of relevant gymnastics, repose and quietude should be sought, alternately interspersing your exercises with aggressive and enervating athletic and other outdoor exercises. Lessons in self-control, motionless attitudes, firmly looking at one object for the course of from one to two minutes, are beneficial to build up nerve tissue, and materially assist in securing mental and physical composure, which is so valuable to one who stammers, or to those who were once stammerers; then relative success is assured. The natural tendency is to fall into improper vocalization with attendant vices; unconsciously at first, eventually imperturbable in character, and may be considered one of the offensive mannerisms. To checkmate it, the stammerer's *will* must be employed either intuitively or consciously.

It is encouraging to note that when a stammerer is intensely absorbed in thought, he seldom ever stammers. This fact alone should give him hope and make life more worth the living. It should teach him not to be backward in society and business; nor to be too sensitive at home or among friends.

## A PRACTICAL DISCUSSION OF STAMMERING

As we are about to consider the subjects of stammering and stuttering, let us go to the dictionary and see what we find in regard to definition for these words. It takes but a minute to ascertain the fact that they are used synonymously and hence are considered as having the same meaning, therefore to stammer is to stutter, and to stutter is to stammer. If such an authority as this confuses the meaning of the two words, it is not surprising that the general public should consider them one and the same thing. Indeed, almost any defect in speech seems to be termed stammering by people who have not made a specific study of this malady. In reality, the difference is very marked and the following directions can, I think, properly be made.

Stuttering is a defect in respiration and vocalization, sometimes causing spasmodic action or the rapid repetition of a word or syllable before the following one can be uttered.

Stammering is, certain conditions prevailing, the lack of ability to articulate or control the organs of speech, which seem to be tightly held together for the time being, this condition in many cases necessitating the substitution of one sound for another.

Speaking of persons having no impediments of speech, the action of the mind, nerves, muscles and vocal organs is so harmonious that they are conscious of no physical or mental effort other than that of exercising the latter to the extent of originating the idea in the brain. On the other hand, the stammerer can give expression to his ideas only after the greatest physical and mental exertion.

Sound is produced by the expiration of air through

the larynx passing between the vocal cords, through the opening called the glottis.

As the chest has a natural tendency to contract, the act of inspiration might be termed voluntary and expiration involuntary; but when we wish to speak or sing, the natural contraction of the chest does not produce sufficient force in the exit of the column of air from the lungs through the vocal organs to produce sound, and hence it is necessary to call into play the assistance of the diaphragm, a muscular wall at the base of the lungs; this organ is to a greater or less extent under the control of the will.

In vocalization the vocal cords are drawn closely together by their controlling muscles, and in the production of a low tone are comparatively loose, whereas if a high tone is desired, this accommodating set of muscles stretches them tightly across the larynx or voice box. This is the principle, as we all know, of the production of high and low tones in a stringed instrument. In the production of sound, the vocal cords have nothing to do with the obstruction or production of speech, unless it is in the case of a stammerer when he completely closes the glottis by his spasmodic efforts to speak.

Vowels and consonants go to make up articulate speech, the former being produced by uninterrupted currents of air passing through the vocal organs whose different positions produce the several sounds; the latter are formed by the air currents being interrupted in their passage by the tongue, teeth or lips. The consonant sounds *m*, *n*, *f*, *s*, can be prolonged as long as expiration and a particular position of the vocal organs is maintained. In the production of (*p*, *b*, *d*, hard *c* and *g*) prolongation of sound is impossible as the passage of air is completely blocked in their utterance. It is on the consonants that the stammerer or stutterer has his greatest trouble, as they are much more complicated with respect to the positions of the vocal organs used in their production than are the vowels. It is usually in the more advanced stages of the



malady that the stammerer begins to have trouble with the vowels.

The real cause of stammering seems to be an inassociation of the muscles employed in performing the various functions of the organs of respiration, vocalization and enunciation, respectively.

As to the cause of the above lack of association between these organs, it can usually be traced to fright, a fall, nervous shock, physical weakness, imitation or inherited tendency. Although said to originate in many ways, I believe that, as a general thing, it is acquired through imitation either conscious or otherwise.

Stuttering is the first and early stage of a habit that can be called physical in its makeup and manifestations, but after years of mockery a person thus afflicted, who is continually made the butt of jokes, finds that the malady has taken such a hold upon his entire being as to take on a mental phase, and it is when the mental side of man is thus affected that the disease is called stammering, the latter for that reason being the more difficult to cure as there is the mental as well as the physical side with which to deal.

The principal trouble in stammering and stuttering, is the lack of an unobstructed passage for the breath from the lungs through the speech producing organs.

In regard to the production of speech, respiration is to a great extent voluntary, as are also the actions of the essential organs. I am now referring to perfect speech. Where impediments exist we find spasmodic involuntary action of the organs where the power of the will should dominate. Spasmodic action in stammering is an involuntary, unnatural, contractive action of the muscular parts. We find in cases of stammering the condition is manifested by an involuntary, unnatural, contractive muscular action of the glottis, lips, tongue and other organs concerned in respiration. As the actions of the muscles are convulsive and irregular, it must stand to reason that they are controlled by nerve centers that

are in the same condition, especially those whose functions are of volition, motor and reflex action, and in particular that center the impulses of which control the respiratory movements of the ribs and diaphragm.

It is a well known scientific fact that nervous disorders seriously affect the mind. From this it seems that the causes of defective speech are in the brain, nerves, and muscles and not in the organs of speech, excepting, of course, when there is some malformation of the latter, but this is so rare as to be scarcely worth considering.

We often hear of cases of stammering acquired through hereditary transmission, but this theory is erroneous, as faulty action cannot be inherited; that which is inherited is the tendency to stammer which, of course, may be developed through association or imitation.

Defective speech, by keeping one in a constant state of worry and fear, so affects the nerves and mind that there is a constant tendency to increase the seriousness of the malady in every way; for this reason a case of stammering is very seldom outgrown.

Who has not watched a stammerer's vain attempts to speak when he gasps, sobs, rolls his eyes and contorts his limbs? When finally he succeeds in forcing out that which he wishes to say, it is often said so indistinctly and imperfectly as to render necessary a second attempt, usually far more disastrous in its results than was the first; when he has at last finished he seems to collapse completely, every muscle seeming to be lax and lifeless. Who will say that a human being can stand under such a struggle day after day and not become affected in body, and in mind? Indeed, it is a wonder that the poor unfortunate's life is of long duration. What chance has the stammerer to succeed in business when others who, themselves possessing perfect speech, do not hesitate to take advantage of his unfortunate position to benefit themselves in every way in which it is possible?

He shuns society and avoids people with whom it is to his advantage to associate, and, as a result, he cannot help but possess a soul that is filled with bitterness and longing; truly it is bitterness, for does he not see himself distanced in the race of life by those whom he knows are his inferiors in many ways. Not only is the effect upon himself the worst that can be imagined, but he is very apt to teach through association his improper method of talking to his companions; for truly this is one of the most contagious of the diseases known to mankind.

The child of a stammerer has in him the tendency to stammer, and unless treated with the greatest care, will follow in the footsteps of its parent and become afflicted with a form of stammering that is the most difficult to cure. It seems criminal to bring a child into the world, when it is almost certain to be compelled to bear through life a yoke, the weight of which seems to be almost beyond human endurance. | ?

We shall now try and see if there is not some way in which a cure may be effected for this curse that falls upon so many unfortunates. The very fact that stammerers can sometimes converse fluently under favorable conditions, seems to show, that if perfect speech is possible at one time, it must be possible with proper treatment to obtain the same results under all conditions. But since the disease is mental in its cause and origin it is, of course, necessary that this side be dealt with in order to gain a foundation for the treatment of the physical condition, for many a stammerer has said that, could he but get up some morning and forget that he had ever stammered, he would be able to speak without difficulty. The subjective side of the human mind, which acts through suggestion has, in the case of the stammerer, had doubt and fear suggested to it for so long a time, that no other kind of thought can be produced without a long course of mental training. It is right here that the stammerer fails in his attempts to cure himself, for he does not un-

derstand how to deal with this mental phase of his difficulty. It seems to be clear that educational methods and means, beginning at the very root of speech, are the only ones that can ever give the patient the necessary confidence to speak and have no thought of failure. But the patience, thought and care required to bring about this condition are great. Ninety-nine out of one hundred stammerers give up for the reason that they do not at once get rid of their difficulty. A man cannot hope to rid himself in a week of a habit that has been growing for years, still yield it must to proper, patient and systematic treatment.

First must come mental discipline of the strictest kind, for in no other way can the mind be trained to control the muscles that have for so long a time rebelled successfully against its dictates. All habits, the practice of which are injurious to the nerves, heart, brain or respiration, must be dropped at once. The patient should be drilled in the production of fundamental sounds and learn to produce them properly and with ease; he has always been in the habit of using too much force.

The next step is to combine sounds, or more properly vowels and consonants, and lastly words and sentences, for only by this slow but sure method, beginning at the very bottom, can we hope to attain any great amount of success. Deep and regular breathing must be practiced until it becomes second nature to always have a good supply of air for the production of sound. Another thing of vital importance is to learn to relax all the muscles concerned in the production of speech, for it is their tense condition when attempting to speak that causes the trouble; another suggestion is to talk easily and not try to force for when one attempts to force his words he is making an effort to speak in an improper manner.

All drill should be under the eye of a competent instructor, who can see whether or not the patient is practicing properly or whether he is becoming lax and careless, at the same time there is a system resulting in benefit from



all exercises which benefit it is almost impossible to obtain if work is done alone; interruptions are not only frequent but fatal to a successful cure. Physical exercise is a most important factor and must never be neglected. It is best to indulge in this part of the treatment while out of doors or in a well ventilated room. These exercises promote a healthy action of the muscles and nerves and produce as a result good health, they also train the muscles to obey the dictates of the will. Violent and excessive exercises must be carefully avoided as these increase the heart action and have a tendency to produce too much haste and hurry, which are just the conditions that the instructor must make the patient avoid as far as possible. Regular hours must be set down for everything, especially eating and sleeping. The latter being the period of vital recuperation, should never be robbed of its full share of time which should be indulged in as much as possible before midnight, as, of course, this is the most beneficial time in which to take that necessary luxury.

A cheerful condition of mind must be cultivated and preserved at all times, for the habit of brooding is most fatal to the stammerer's condition, as thoughts of the latter type irritate and disturb the harmonious circulation of the nervous forces and prey upon the nervous system in general. Self-confidence *must* be acquired, for while lack of it cannot of itself produce impediment, yet once convince the sufferer that he can speak as well as anyone, and he is on the high road to success.

This is, I think, without doubt, the most difficult of all habits to cure by one's self, still if one has the strength of mind and will to succeed, it can surely be done, for "what man has done, man can certainly do." The advantages to be had at a good institute are so many as to leave no doubt in one's mind that it is the proper place to go if one has the means at his disposal. There are there no interruptions and no fears of disturbing anyone in the use of the necessary exercises and studies. The rules

and hours are strict and regular and must be respected by all. The patient knows that he is there for a purpose and will let no influence or temptation distract him from the pursuit of that object, the accomplishment of which is beyond valuation. No tutor can cure stammering without the hearty coöperation and sympathetic labor of the patient, who must be made to feel that only through his own efforts can he be freed from his impediment of speech.

Cures have been effected at home and alone, however, only after the most patient and persistent efforts can the stammerer hope (without aid) to at last experience the joy, and enter into the realms of unfettered speech.

## STAMMERING—ITS EFFECTS AND TREATMENT

Something like fifteen years have passed since the moment that I first realized I was a victim, or at any rate the subject, of one of the most distressing maladies to which human flesh is heir, a malady which has proved to be a stumbling block from that day to this, making existence under such conditions one continual struggle between the mind on the one hand, and the organs and muscles affected, on the other. It is unnecessary to add that this bane is that "affliction unnumbered among the world's sorrows." It is because the world has failed to realize that it is a great affliction, that it is so hard to bear.

The life of a stammerer is one of continual uncertainty—an uncertainty so dreadful that it eats like a canker-worm at the energy, the enthusiasm, the cheerfulness, and what is worse than all, at the vitality of a man or woman, from the time it first makes itself apparent. Even the stammerer's health is affected, and though this result is not invariably an accompaniment of stammering, yet in a great many cases the person with fettered speech, if he does not

overcome his impediment, has a shorter life than he would have enjoyed if he could have expressed himself like his fellowmen.

Although the stammerer is an object for sympathy and encouragement, the former, I am afraid, is rarely bestowed by those who know nothing of the subject, while encouragement it is almost impossible to obtain. Encouragement usually is offered in the form of something that helps him in his uphill struggle, and which none can give except those who have themselves learned the proper methods to be adopted in the cultivation of fluent speech.

The cure of stammering has not yet been recognized as a crying want, in the same way that the cure of deafness has been recognized. This is explained by the fact that while deafness may be detected by anyone of average intelligence, the stammerer goes through life concealing his impediment, making use of tricks and mannerisms. What is more galling for a young man or woman, with a highly intelligent mind, than to be denied the expression of thoughts? One may, of course, resort to the use of synonyms.

It is almost remarkable with what cheerfulness and steadfastness the stammerer applies himself to the task of pushing on, in spite of his difficulties. He swallows his disappointments, his chagrin, his defeats, his shame. He dismisses from his mind the scoffing of his fellows, the ill-mannered taunts of those who know not the kind of creature they are dealing with. It very often is the case that he knows if he had their privilege of being able to speak what was in his mind, he would not deign to compare himself with such individuals.

One might ask what keeps the spirit alive when such ponderous weights are resting upon it threatening to crush out its very existence. "Hope springs eternal in the human breast," and if any type of man is the embodiment of that great truth, I say that man is the stammerer. It is this that keeps alive the enthusiasm of the fairest of the victims of stammering. But how many

there must have been, whose hopes were never realized, who, in fact, seemed to sink more deeply into the mire of their pitiable state, simply because they never had heard of any means of escape, and, therefore, had not the opportunity of curing themselves. Let us hope and pray that the cures that are now being made will multiply rapidly, and thus save thousands from a blighted existence. Here, surely, is a field for philanthropists to work in, but, perhaps, we shall see nothing from this direction until that class includes one of ourselves.

Probably the happiest moments of a stammerer's life are when he flings aside all ambition and yearnings and ideals and substitutes for these thoughts, the self-assurance that when stammering has taken from him all that it can, he has still left the knowledge that he has done his best; that his success in this life will not be measured by the quantity he has accomplished, but by what he has made himself in spite of the terrible difficulties he has had to face; he will then look upon his affliction with the serenity of St. Paul and realize that his weakness has only drawn him more closely to the Giver of all power by forcing him to rely upon the Almighty for courage and strength to tide over the period of waiting for the longed-for freedom.

But if the mission of the writer were only to expatiate upon the trials and troubles of one so afflicted, this article would not be worth its place in the library of the stammerer's best literature. It is rather to persuade him to look upon his trouble with fortitude and calmness, to never lose sight of the fact that he is one of God's creatures, placed here to carry out some purpose, and that his success or failure in this will very largely depend upon himself; to remind him that, however bad a stammerer he may be, he can still let his dealings with others be characterized by that manliness and force of character which should be the attributes of all men.

The stammerer, thrown upon his own resources by being shut out from society and cut off from his friends and acquaintances by reason of his inability to converse with



them, develops his thinking powers to an abnormal degree. This may, on first thought, appear to be an advantage that stammerers have over other people, but after due consideration it must be admitted that this is not so, for when he has reasoned something out in his own mind, feeling perfectly certain himself that he has arrived at a correct conclusion, he is, in all probability, too timid to make it known. If he does manage in some way to reveal his ideas or announce his plan, he may find that he has only applied the powers of his own mind to the case, and that by not having had the criticism and assistance of others, he has been allowing himself to drift along wrong lines of thought, and is convinced that after all his ideas are worth very little. In short, out of his own closely confined sphere, he has been trying to produce principles that would be practical for the bustling world, and he has failed.

When it comes to fulfilling some object or gaining some end that is clearly set out, he shows his superiority. Driven to use synonyms in order that he may say what he wishes, he very soon becomes an artful person, and this quality is not long in permeating his whole nature. Under ordinary conditions and put to a good use, this would be worth something, but it is not to this that he must look for the means of making a man of himself. He should discard all artificial aids to expression, and what is more, he must certainly do so before he can hope to speak as nature intended. The man with the broken leg would never be able to walk again if he did not put aside his crutches, and then little by little exercise the weak limb until it regained its former strength.

Another important point to be considered in the effects of stammering, is the tendency that one has to grow up with a morose, gloomy disposition, a soured temper, and a general inclination to move about and to act in a despondent, inattentive manner. He feels himself, as it were, being drawn into this state of mind, and often enough feels powerless to resist. Here is the chance for him to use all the will-power he possesses. He must learn that,

come what may, he must not let his spirits droop, but must cultivate a bright, happy disposition. Let him take into his life all the sunshine that he possibly can, and substitute for that care-worn countenance the reflection of that hope that burns within him.

It is the desire of the writer that he may *realize* that hope and to that end he ventures to warn the stammerer against the pitfalls that beset his path, and to direct him by the surest and shortest way to the goal he is making for. Depend upon it, the only good method is the natural method, that which breaks down your old habit of improper breathing, contraction of the muscles, pressure of the organs, the characteristics of attempting to speak in an impossible manner. Corrective exercises must be carried out under the control of the will, which will have to be trained and strengthened until there is a feeling that nothing can hinder the expression of thought.

Do not imagine that this task is a light one, but it is an interesting one to an earnest stammerer, although it entails a vast amount of strenuous effort, and will call out all your stock of perseverance and patience. It will mean the controlling of your emotions, and the putting away of anything else that tends to upset the nerves and that prevents them from having full command of the muscles.

As soon as the stammerer discovers that there is a way open for him to relieve himself of his burden, and knows about the path of discipline and, perhaps, self-denial that he must travel along, he must begin fixing his ideal. He must fancy himself a fluent speaker, moving about among his fellows with that self-possession that springs from forgetfulness of self. But if he is determined he must not stop here; he must push on toward the attainment of his ideal and continue his advance until he is at last able to say he is cured. He must aim very high, but must not set about it in that half-hearted, feeble manner in which he has been accustomed to do things. He must never rest, but continually keep his ideals in view, that every day it

may make a deeper impression upon him; it will thus become more and more a part of himself, until at last he finds it has become a reality.

By following this course of action and pursuing it conscientiously, he is winning for himself another reward, another blessing in disguise. By idealizing in this branch of self-culture, he is training his mind to attack everything he sets himself to do, with an interest and intensity that cannot be thwarted. He learns to concentrate his mind and to put all his energies into the piece of work in which he is engaged. He must aim at being a perfect type of man, that is to say, he must make himself as nearly perfect as possible. He must look forward to that harmony of mind and body that will allow him to perform whatever is before him with deliberation and judgment, no matter what circumstances there are to upset him. Many of his ideals and aspirations cannot be attained until he has cured himself, but then when he feels himself, perhaps for the first time in his life, speech-whole, these principles that he has formulated and carefully fostered, will spring into action, as it were, automatically.

The stammerer I have had in view, while writing, is the one who has never yet given himself up to the idea that he will carry his impediment to the end of his days. The other, which never attempts to raise above his present miserable level, but settles down to a life of servitude and, perhaps, dependence on someone else, because he will not exert his mind by trying to throw off his intemperate and vicious habits, is, in my judgment, hardly worth attention. In the former class there are many who are chained down, who feel that they must be cured before they can fulfill what appears to them to be their true purpose in life. They are now, it may be, occupying positions or doing some kind of work that they are totally unfitted for, and many there are, no doubt, who, if they could speak with freedom, would prove to

be valuable to many professions and to many avenues of business.

To these stammerers let me say: direct all your efforts to one end: make all your work only a means to that end.

What does it mean to the stammerer to have the glorious privilege of expression by the words of his own mouth? He will be, when cured, a different creature; starting out on the path of discipline and relying for encouragement upon his faith and hope. Little wonder that his face glows with a spirit that it never had before. He is bound to feel that new life has been given him that will enable him to go back to his business and succeed, or, maybe he will decide to commence a new business with a light heart and a veritable storehouse of energy.

But even now he must not grow careless; remember that bad habits of twenty or thirty years standing are not blotted out and permanently replaced by good ones in a week or two; but by determined and continuous striving, so that for a certain period after he is said to be cured, his efforts must be as persistent as at any other time in his life.

His opportunities for doing good to his fellow creatures having now arrived, I would remind him that charity begins at home, and ask him to give a helping hand to those who are still laboring under the bond of their affliction.



## STAMMERING A NERVE-DESTROYING HABIT

Stammering is no new thing, and cannot be charged, like many of the modern ills, to conditions of civilization. Scripture references to this malady are commonly known, instances of it being on record as far back as the days of Moses, that leader of the Israelites being afflicted. Demosthenes, that greatest of ancient orators, was afflicted with a modified type of stammering, which he overcame only by the greatest perseverance and severest discipline.

The subject of stammering has occupied the thought of many of the best minds of all nations for centuries, and its cause and cure have proven a prolific source of literature. Hippocrates (460 B. C.) was the earliest author of a thesis on this subject, and since his day the medical world has not lacked for an opportunity for educating itself thereto. In common with all other subjects that have caused great interest, there has been a great deal of chaff with the grain. Many false theories and practices have been evolved; fallacious deductions have crept in and numberless systems have sprung up whereby it was confidently claimed absolute eradication of the defect could be brought about. Time, experience and observation have sifted out the chaff; empirical methods have been exposed and relegated to oblivion; modern science and research have exploded the theories that were fondly cherished and adhered to; and now, by the immutable law of the survival of the fittest, methods and systems are employed which restore to the unfortunate sufferer his power of free and unimpeded speech and with it a gratifying sense of freedom from a cruel and wretched thrall-dom. The lives of the majority of stammerers, in addition to being full of suffering and disquiet, will be abnormally

shortened by a depletion of vital energy applied in making up the tremendous waste induced by an unnatural mental and physical strain.

Stammering is a lack of the mind's control over the organs of speech, thereby instituting an inability to produce desired sound at will.

Stuttering is a defect in respiration and vocalization, causing a rapid repetition of a syllable or word, and is usually accompanied by spasmodic actions of the organs of speech and sometimes of different organs of the body; or the body as a whole becomes violently convulsed. Stuttering is so closely allied with stammering as to be often combined with it.

Stammering is more a condition of the mind, while stuttering has its origin through nervous weakness.

Stammering may be caused by heredity (inherited tendency), mimicry or sickness with fever, viz., scarlet fever, diphtheria, typhoid fever, etc. It is also caused by violent emotion, as sudden fright, etc.

Hereditary stammering is probably the most deeply-seated type on account of the natural or inherited tendency toward the defect. It is not possible for stammering itself to be inherited. A condition or disposition favorable to the development only can be inherited. If stammering itself could be directly transmitted from one generation to another, it would be found that children disposed to stammer would show signs of the defect at their first attempts at speaking. A child seldom shows signs of a speech defect until after the third year. What would otherwise prove to be a positive case of stammering from heredity, can be wholly overcome by using due precaution and guarding against it in every way possible. From its earliest infancy, surround the child with conditions and environments as nearly as possible directly opposite to those that might unduly excite it. Do not subject it to shame or ridicule. Avoid, if possible, sickness accompanied by fever, and most certainly keep it away from any stammering person. In due time encourage a proper amount of

out-door exercise, taking care that it is properly clothed. Give the child plain, nourishing food and see that it has plenty of sleep. If these directions are faithfully followed there will be no opportunity for the inherited tendency to develop.

A great number of stammerers gain their foundation for the stammering habit by mimicing or imitating others who are afflicted. Such cases, if not checked at the start, speedily develop into a chronic and steadfast type of stammering. Such cases rapidly assume the same phases as those having their origin from any other cause.

Stammering caused by sickness, accompanied by a high fever, is frequently met with. It is to be understood that stammering is a disease by itself. It is not an affliction that a person can be possessed of and be entirely sound in all other respects. It is a predominating feature of an already existing mental and nervous weakness. Therefore, if a person whose constitution tends toward the development of stammering, (should the proper condition be presented,) have his vitality lowered, the predisposed tendency would have a chance to assert itself.

Stammering may also be caused by severe mental emotion, as sudden fright or severe injuries to the head and back. Cases resulting from malformation of the organs are rarely found.

The ills to which flesh is heir are numerous and grievous, but there are few that are more prolific of embarrassment and mental pain to the victim or his associates, or that abound in more that tends to discourage and dishearten the immediate sufferer than stammering or other forms of decided impediment of speech. Stammerers are a class of sufferers, too, of whom the busy world knows little, for the very nature of their malady retires them from society, from the professions or the privilege of entering upon a career at all public in its character. He is pre-eminently a self-conscious being, and his defeat being ever before him, his life is one of constant mortification and trial. To the confirmed stammerer, this speech

defect appears an insurmountable obstacle to the achievement of his fondest hopes in life, and his existence at times become a burden. Intensely conscious of the disadvantage under which he labors, and with little or no hope of overcoming the difficulty, he often relapses into moroseness, melancholy, despair. His meditations are ever upon his unfortunate condition and he becomes grim, irritable, sensitive to an almost intolerable degree, and full of vain imaginings. He loses resolution and application—no longer persevering in his efforts to overcome in his discouraging strife. He suffers alone, for the sequence of his disease is not infrequently an almost total loss of self-confidence, and with it a loss of confidence in fellow-man; he cannot trust himself to confide his woes, when he stands so much in the need of sympathy.

The picture is not overdrawn, although it is not claimed that all sufferers from this ailment develop this phase of the case. But few of them, however, are free from mental anguish or from the evils consequent upon that derangement of the nervous forces of the system which is an almost inevitable accompaniment of the disease.

Although stammerers have an insufferable amount to contend with, still it takes away some of the sting to bear in mind that there are some afflictions that are more far-reaching in consequences than is stammering, and for the most part incurable: consumptives, the deaf and dumb, a cripple or a sufferer from blood disease. Surely the stammerer would not exchange his lot with any of these.

That stammering exerts a pernicious influence upon the mental and physical well-being of those afflicted, is conceded, and although the inroads made upon the material health is cause for alarm, the physical aspect is one that excites deep commiseration. The fact that mental influences and conditions are actuating causes in the production of diseases, is no better illustrated or confirmed than in the case of stammering.

His stammering not only mightily affects the stammerer himself, but endangers the speaking of every



young person with whom he comes in contact. Most persons, especially the young, cannot help the tendency to imitate the habits of those with whom they associate. The danger of the innocent child of parents, one or the other being a stammerer, would be very great; aye, and it would be but natural for a child of stammering parents to receive the same tendency toward the dreaded affliction, develop the same speech defect, suffer the same ridicule and thoughtless jests of its playmates, the mortification, melancholy, passionate sensations of youth, and the restricted business and social life, to say nothing of the hopelessness of decided success in either, and finally to be instrumental in bringing another innocent into the world to take up the same yoke of mental and physical disquiet.

The stammerer being, as a rule, afflicted both mentally and physically, requires a dual treatment, and each individual case is apt to demand some slight modification from the general lines of treatment according to temperament, character, intellectual and moral capacity, etc. What the treatment should be, has been for ages a question, giving rise to many contentions. Most of the ancient methods, and not a few of the more modern ones, too, were founded in error, and so long has the truth been obscured that the affliction came to be regarded by many as incurable. Demosthenes at first resorted to placing pebbles in his mouth; other devices and numerous mechanical appliances sprang up. Celus (A. D. 37) advised the use of a gargle of thyme, hyssop, or pennyroyal and the chewing of garlic, onions and mustard.

As late as 1340 De Chaulias recommended a three-fold treatment for stammering, viz.: pungent blisters, frictions and cupping of the neck as a diversion of the humors; dessicating embrocations on the head made of mustard, pepper, etc. Come (1827) recognized the mental phase of the infirmity and the importance of treating it from that standpoint as well as physically. As late as 1852 methods of surgery were practiced for the treatment

of stammering, but no cure was ever known to come from it. That stammering is curable, no one who takes the time to figure out the cause and effect in the everyday events of life, will doubt. Stammering is an unnatural way of speaking. Nature intended that every person should have free, unimpeded speech; therefore, if there is defect in this respect, it simply means that at some time in life, from some cause above mentioned, or possibly from some other cause, a person has given way to the tendency to stammer. Not possessing enforcing will-power to check the habit, he will at some future time in life have to take the time and go to the expense of being taught to cease the unnatural, abnormal, yet surely curable habit.

It is an immensely important thing to every stammerer to think and think hard to reason out problems in everyday life which will work to his own advantage and welfare and to the well-being and happiness of those around him. Bring to mind a person in the household on getting up in the morning. He may not be feeling in good humor, and on meeting some other member of the family will mention the decided disagreeableness of the weather or will growl about a triflingly late breakfast. These pessimistic melancholy feelings cannot help but affect the hearer to some extent. It is best to see the rosy, bright side of affairs, for "every cloud has a silver lining." Stammerers should cultivate a cheerful disposition.

The street cars in the morning are always well patronized. The person who rides to his business in a street car is not doing nearly as much for himself and others as one who walks, thereby gaining the benefit from the oxygen with which fresh air is loaded. The exercise to the lungs and limbs, is very beneficial. A street car, or any enclosed place where there are several people at one time, contains carbonic acid gas, which is a deadly poison.

Successful treatment of stammering recognizes the necessity of a properly cultivated mental influence, not only

upon, but proceeding from, the pupil. The controlling or actuating power of the mind over organic energy, is a quality to be determined by temperament and development, by intelligent and systematic exercise. The disciplining of the mind of the stammerer is one of the greatest difficulties met with in the treatment of this affliction. Stammerers have many characteristics peculiar to their malady; as lack of confidence, skepticism, and a general disregard for, and seeming indifference to, their responsibility in correcting their fault. For these there is created resolution, continuity of purpose, faith and hope. How these attributes may best be developed, depends largely upon the temperament and mental caliber of the stammerer; but, in any case, whatever tends to promote and develop character, stimulate the intellect, insure mental placidity, increase a proper conception of moral responsibility and divert the introspective thought of the patient, will tend very materially to aid in the cure of this malady.

If all stammerers knew the all-around beneficial results coming from physical exercise, there would be more attention given to this important item. The proper kind of exercise, taken under right conditions, has a decidedly beneficial effect on the whole man, both mental and physical. It strengthens the heart's action, thereby quickening the circulation. The quickened breathing strengthens the lungs, and the nervous system is made stronger, thereby inducing more calmness and placidity of mind; in fact, the stammerer is made happier and more contented and his infirmity is lightened, as the severity of the impediment varies according to the general physical condition. Exercise should be taken at regular intervals, at least once a day, and care should be taken to have as much fresh air as possible, if the exercise is taken indoors, and to have the clothing loose. The most important exercises are those which bring into play the muscles over the vital organs, viz., heart, lungs, stomach and digestive tract. Running, or any vigorous movements of the body which quicken the heart's action and induce quickened breathing, are good.

Bending the body at the waist line, from one side to the other, forward and backward, bring into play and strengthen the muscles over the stomach and abdomen, thus aiding the organs of digestion in their work.

Proper breathing is as beneficial a thing in itself to the stammerer as can possibly be indulged in. Every inhalation should be made so as to fill the lower part of the lungs first and upper chest last. Deep breathing serves to give an erect carriage to the body, develops the chest and quickens the circulation. Filling the lungs full at each inhalation is the only proper way to breath when in the open air; thus the oxygen which is contained in greatest quantities in the open air, has a great chance to benefit by reaching the remotest part of the lungs. When stammering occurs, proper breathing is impossible.

Eating is a habit which is very necessary to repair the waste and build new tissue, but which can be carried to extremes and oftentimes is. The stammerer, having his will weakened by continued failure, through trying to speak correctly, has more to contend with in this respect than though he were not a stammerer. The symptoms of indigestion are rather common to most people, and, suffice it to say that every indiscretion in eating leads to indigestion, which causes impoverished nerve force and consequently more than the usual difficulty in speaking. If a stammerer thinks and reasons as he is capable, he will know the amount he should eat, and properly exerted will-power should keep him within bounds. Fortunate is the stammerer who has a decidedly small feeding instinct. There is no chance of a person in health eating too little.

Some stammerers are unable to control their appetite. That which might be a hearty meal for one person would be slow starvation for another, therefore a stammerer should study his own needs and regulate his diet accordingly.

Our physiology teaches us that white bread contains but little nutriment, therefore use whole wheat bread instead of white. Meat is a highly stimulating article of



diet, and stammerers should eat sparingly of it. Eat slowly and cheerfully; masticate thoroughly before swallowing; abstain from the use of tea, coffee or highly seasoned food, and do not drink while there is food in the mouth. Indigestion is an aggravating evil to stammerers.

Sleep should be indulged in freely, as it is then that nature has the best opportunity to restore tone and vigor to mind and body. The nerves, which so much need rest in a stammerer, have a chance to regain their strength in sleep. Loss of needed sleep is another evil of the afflicted.

Stammerers who are strictly moral have much better prospects of a sure, speedy cure than have those who may be immorally inclined. The very nature of the impediment shields the stammerer from bad influences, just as it closes the avenues of social pleasure. A healthy mind, clear conscience, and strong physical organism, serve to make a cure much nearer possible than if the conditions were just the opposite. A clean body goes hand in hand with a clean mind, and good health cannot exist in a permanently unclean body.

## MENTAL HELPS FOR STAMMERERS

"There is nothing new under the sun." No matter what we write, think, or act, we shall find that we have echoed, and repeated the thoughts and actions of others gone before. Therefore, I do not hope to write anything new, but perhaps I may be able to put the subject in a somewhat new light and thereby cause someone to view his trouble and possible cure from a different and more hopeful standpoint, than he now sees it.

Many will agree with me in the sweeping assertion that the stammering habit is, above all other afflictions, the most mortifying and distressing.

Taken in the early stages in infancy, the cure is a simple matter, amounting to a preventive, in fact. If all parents understood the trouble in all its varied types,

with the modes for prevention and cure, there need be no institutes erected for the treatment of this malady.

When the young child shows signs of speech defects, whether inherited or acquired through imitation, the guardian can easily stop it at once and decidedly by employing the right means. When speech is attempted and hesitation, repetition of sounds, or other signs of impediment are made manifest, stop all effort at once. Now, with the little one before you, in a gentle, kindly tone speak the words slowly and distinctly, while it follows you. In this practice, be careful to show the child how the lips and tongue are used, as well as how tone is produced. A few lessons of this kind usually serve to put all such threatening evils to flight at once and forever. I know this is true, because I have had the care of several young children, likely to develop into the most inveterate stammerers, and more, the malady seemed inherited, several of their family being sufferers, and yet these cases readily improved under this treatment. We cannot be too careful of these so-called little things, although some ignorant or thoughtless people seem to think it needless to bother about the habits of children, claiming as a reason the certainty that they will outgrow them. How foolishly some really sensible people do talk! Out of a thousand such cases one case may improve, while the other nine hundred and ninety-nine cases steadily grow worse.

Speech is one of nature's means by which our feelings and wants are made known. Tone is the modification of speech, and breath the foundation of tone. Now, to get the latter, it is necessary to have full control of the former, which is possible to one who will practice simple breathing exercises. Of the true manner of inhaling, many persons, especially sufferers from the malady in question, have no idea or conception.

Upper or mere chest breathing is a practice to be condemned, where made habitual.

Inarticulation is, to a considerable extent, due to the

careless habit of unnatural respiration. For the remedy of this habit, practice breathing exercises till the right way is well established. Take a deep, slow inspiration forcing the abdominal walls outward, then with the muscles of the diaphragm continue inhaling, while you count; ten at first, then let the breath expire in a slow, smooth volume. Now, practice a number of short breaths; then the long breath over and over many times, making the counts longer, until forty and fifty can be reached. However, do not prolong the exercise till the tone trembles, as that is harmful to health. Have stated times, three or four each day, to practice and accustom yourself to the constant exercise of smooth and deep breathing, for on this depends the stammerer's main chances of recovery. Right here I will say that tight garments, and those which hang from the waist line, must not be worn; instead loose, comfortable clothing, with the weight supported from the shoulders, should be the habit of dress. Tight garments are injurious to health and a bar to the stammerer's success, because they partially stop the breath, thus keeping the muscles which govern it from performing their natural functions.

The chief organ of speech is the larynx, situated in the throat. The opening to the larynx is called the glottis, which has a lid, the name of which is the epiglottis, which is open only when breathing. The epiglottis closes when swallowing is attempted, thus allowing the food or drink to pass safely over the esophagus, the passage which leads to the stomach.

Speech is partly formed and modulated by the lips, teeth, tongue, and palate.

In the adult stammerer the organs of speech, through a wrong use and undue strain, through ignorance or carelessness, or both combined, have fallen into a state of partial uselessness. The parts, seldom used, become stiff and, to a certain extent, paralyzed, which necessarily impairs speech, and in trying to articulate, these parts fail in their function. The sufferer becomes excited in his vain efforts

to speak. He sometimes throws the head forward, which closes the glottis, and cuts off the air passage, producing a most distressing sound, a broken guttural, choppy attempt at utterance. The dreadful strain which invariably attends these frantic efforts, constantly keeps the muscles and organs, which form speech, in an irritated state, eventually creating diseases of the throat, chest, and lungs, often ending in the most severe and fatal maladies.

Let none foolishly imagine an instantaneous cure possible. There is no such thing. The path that leads to victory must be steep and hilly. The habit that grows with the body's growth, is truly a stubborn and tenacious thing. To destroy it root and branch, patience, perseverance and many other virtues, with a strong, determined will, must be enforced till the habit is eliminated.

For the health of the physical body, a great number of exercises may be practiced to advantage, providing they are not carried to excess. The best time for this is when the body is rested. Two hours after meals is the most advantageous time. At all times, in all places, sleeping or walking, excepting following severe physical exercise, it is important to breath through the nostrils; while the lips are kept closed, unless speaking, singing or taking food and drink. Walking is among the very best of exercises, as it brings nearly all the muscles into play. Ordinarily, most persons would be the better for a daily walk of four or five miles. Rowing, swimming, fencing, boxing, varied systems of gymnastics, horseback riding and other forms of exercises may be added. There is no cast iron set of rules that will do for each one. Each individual should try and find out the particular treatment best adapted for his own case, then stick to it. The daily routine of life, the manner of eating, sleeping, drinking, and of exercising generally, that would build up robust manhood in some, would prove detrimental to the health of others. The rule which is generally best to follow, is persistency of purpose and moderation in all things.



We are told that, "As a man thinketh in his heart, so is he," the truth of which we have no right to doubt. Every member of the human family must prefer happiness and ease in this life, and all could have it, too, if they but knew how. Ignorance of causes, and the consequences attending, bring pain, sickness and death.

We often hear people lamenting over their afflictions, and wonder why a just and feeling God sends them such hard trials; when they in their ignorance and wrong attitude toward Him—The Law—brought this trouble upon themselves. God always keeps His promises. It is we who fail to do our part, disregarding the law that fills our lives with inharmony. Now, the very puzzling problem of disease and troubles of every kind is solved in the relation which exists between the mind and body.

The body is kept in strength and health according to the purity of the mind. Right and good thoughts bring peace and happiness, while bad thoughts reverse the results. Gloomy, ill-natured, morbid thoughts invite the conditions of hopeless despair.

Ills of every nature are mental in origin, in growth and maturity. In the proper thought control we find the means that leads to a cure of all sickness, sorrow and trouble. Now, this is dealing with cause, leaving the effects alone. The human mind, like a loom, is ever weaving. Our thoughts form the material for both warp and woof, or filling. If the thoughts we gather and weave are good and pure, the fabric—our life—is good, useful and beautiful.

The mind fashions and rules over destiny. It brings peace and health conditions, or those of darkness and despair. Either God and Heaven, or the Devil and Hell.

In the event of birth we are brought into the world to buffet the waves of the dread sea of life—of right and wrong. To avoid the dangers of wreck and ruin, we must exercise the knowledge and power which lies dormant in every creature.

We receive our mental impressions from the influences which surround us, if they are good, then is the character good. The thoughts and impressions, or a composition of both which bring us blessings or curses or a mixture of both, the real character most commonly found in people must be good or bad. We get ideas and suggestions in the conscious mind; the sub-conscious mind seizes them and uses them to build out visible body in strength or weakness according to their good or evil qualities. Now, suppose a loved and trusted friend names a positive cure for our besetting sin or ill habit, how gladly do we try it; finding sure enough our sin or habit vanishing, because of the faith we exercise in our adviser, not so much because of the efficacy of the remedy itself. Here, as elsewhere, unbelief through ignorance cuts us off from these blessings. Because it is unseen, we cannot trust in this great force. Our sub-conscious minds stand to us as the healer of all our ills; by using the good and hopeful suggestions of others, we can be our own counselor and healer in the matter of diverting and curing ills. Let us try it in this trouble of speech. As God's little ones we are entitled to every blessing, even perfect speech, so we trust Him for it, and that part of us which is unperishable, and has it's being with God. Daily, hourly, we believing, give ourselves forceful suggestions to the effect that our troubles are vanishing, and soon will be gone. Each night we fall asleep with this idea uppermost in the mind, and so sure as we do this, we will, after a little time, find ourselves, as we in our hearts believe. To get this idea of right thinking fixed in the mind, is the only trouble. After the habit of trusting is once formed, it is easier than that of doubting. I hope my readers understand my meaning; if so, and this habit of trusting in self and God is once fixed in the mind, it will be easier than that of doubting. The darkness which now envelopes you will turn to light, the cravings of the heart will be realized, all *doubt* and *fear* will flee away, *faith* and *hope* will be

established, and you will enjoy that great "peace of mind that passeth all understanding."

## A STAMMERER'S VIEW OF STAMMERING AND STUTTERING

In the progress and advancement of the nineteenth century, surely no blacker cloud of mystery has been pierced than that of the true cause of stammering. In former days this affliction was considered almost non-curable. To be sure, quack doctors performed their tricks on hapless victims, but in nine cases out of ten the patients were made worse rather than better. Now, institutions are being erected for the betterment of this dread disease which not only say they will cure, but do it. Thoughtful men have dug down to the root of this evil and are now offering their ideas to speech sufferers everywhere. Surely, we stammerers ought to be thankful that we are living in this day and age of the world!

Stammering and stuttering were once confounded, but of late years have been separated, and now each has its own meaning. Stammering is the inability of the will to control, at times, the organs of articulation, accompanied by a spasmodic action and a hesitating manner. Stuttering is the rapid repetition of one sound or syllable caused by imperfect breathing and articulation. The former is mental, being a disease of the mind, and is often accompanied by facial contortions or drawing of the limbs. Stuttering is a physical defect, and is often accompanied by a spasmodic action of the whole body.

Stammering can be divided into four main classes: those cases caused by heredity, fright, mimicry or sickness. There are other causes, but these are the most common ones.

Cases resulting from heredity are the most severe. Here

the state of the mind is abnormal and needs special training to educate the defect.

There are fewer cases resulting from fright than from any other of the four causes. The affliction is usually caused by a shock to the nervous system, or by a previously timid and shy disposition.

Mimicry has produced at least one-fourth of the cases of stammering. Those who mimic stammerers soon find that the very thing they were deriding has fastened itself on them and then it is too late to repent. At first the difficulty presents the physical evidences of stuttering, but, by worry and mental agitation, it develops into mental stammering.

Persons who attribute their affliction to sickness, usually possess a predisposed weak control of the will over the organs of speech, which, combined with a high fever in sickness, such as smallpox, measles, scarlet fever and typhoid fever, results in stammering. This would indicate that stammering is a disease of the mind.

In former days, and to some extent at the present day, people attributed stammering to defective speech organs. But that this idea is entirely false, is proved by the fact that the sufferer can at times speak very fluently and without hesitation or embarrassment, while at other times he can hardly speak two words or raise his voice above a whisper.

In the early stages of the affliction, one rarely finds real stammering; it is then stuttering, which afterwards, by mental agitation, becomes stammering.

Before stuttering has developed into stammering, the difficulty could easily be eradicated, as it is truly habit only. But how fast it grows; day after day, week after week; the stammerer sees this horrible monster before him grow from a tiny, easily-overcome difficulty, to a towering monster far beyond his control. The days of his childhood-ignorance are over, and now he is daily forced to fight this monster which bars the way to business success, society's pleasures, or even sweet peace of mind. He



realizes that he is lacking in the gifts which are bestowed on others, and often he thinks of the lines:

"Forsaken, forsaken, forsaken am I;

Like a stone in the causeway my buried hopes lie."

Before we can proceed to find a means of cure, we must first consider the organs of speech and respiration. We have found that stammering is imperfect speech. Now, what is this thing called speech? Speech is articulated breath, or, more properly articulated voice. It is the means by which we convey our thoughts to others, and is one of God's greatest gifts.

The lips and teeth, each have their own office to perform, as you can readily observe if you sound the consonants.

Breath is to tone what tone is to articulate speech—the foundation. To possess articulate speech one must first have breath, and a good control of it. To one long used to a wrong method of breathing, it is a tedious task to get full control of his breathing apparatus. To get this control, simple breathing exercises are of great value.

Let us first consider the relation of breathing exercises to a possible cure. When we wish to strengthen any part of the body, we exercise it. This granted, it is easily seen that by exercising that part of the brain wherein lies the stammerer's deficiency, we can give the will absolute control over the organs of respiration. If we exercise the diaphragm, that which gives the command, is also exercised. Thus we see that by training the mind to control the organs and functions concerned in speech, we find a ready response to our desires.

Here are a few simple exercises for practice: Inhale slowly, counting five, hold the breath, counting five, and exhale while again counting five. At first, short counts are necessary, as it is often difficult to inflate the lungs on long counts, but after some practice it is very easy to take longer counts. The exercises, if followed several times every day, will add to bodily health and will improve the talking.

Reading aloud is a beneficial exercise, which, if practiced perseveringly, will relieve one of the embarrassments from which the stammerer suffers. Control the breath and read slowly, thereby quieting the nerves. Read articles of which you know the subject matter, for then you do not need to pay attention to anything but the manner in which you are pronouncing your words.

Physical exercises are one of the most important aids to a cure. They subject the muscles to the power and influence of the mind. Outdoor exercise is one of the best things for physical development. Gymnasium work is very beneficial, but if one has not access to a good gymnasium, use Indian-clubs and dumb-bells, pulleys and such apparatus. Physical exercises tend to improve the general health, breathing exercises aid in this development, and vocal exercises mellow and strengthen the voice.

Stammering is manifested in the lack of harmony between the muscles producing speech. No one will doubt that the stammerer has thoughts that he desires to speak.

The link between mental desire and physical action, is the organ at fault. There is lacking in action the necessary stimulus of the mind and body required for the coördination of the functions concerned in the rendering of speech. This lack of harmony produces stammering.

The mental phase of the affliction concerns the nervous system.

The nervous system is a set of fibers which connect all parts of the body with the brain and at the same time act as messengers of sensation, thought, volition and emotion.

The brain is the seat of mind, conscience thought and feeling, and of all thoughts and desires. A motory nerve conveys these desires to the particular muscles designated to perform such, and as long as everything works in harmony, fluent speech is the result. But all at once, by force of habit, the mind refuses to perform its duty. Thoughts accumulating faster than action, are being piled up, the stammerer gets embarrassed, fear

enters his brain, and confusion of words and actions ensues, causing stammering.

If one wishes to be successful he must cultivate will-power, and especially is it important to the stammerer. He must acquire the habit of willing strongly.

The constant state of fear which every stammerer entertains keeps his nerves continually agitated. The dread and fear that he may not be able to speak fluently, and the anxiety to do so, combine to further his difficulty. Nervousness is by many supposed to be the cause of stammering, but as a proof that this is not so, it is found that as soon as the impediment is cured, the nervousness disappears.

No cure, however reasonable, can be effected without favorable conditions. The pupil's home-life must be surrounded with moral influences, and he must be continually under the eye of his instructor. He must have the proper food and rest, and his changes of diet and hour of retiring must be carefully restricted.

Practice exercises which will give the mind absolute control of the organs; live a life of morality, and summon to your aid all the will-power you can. Determine to stop stammering.

## POINTED ADVICE TO STAMMERERS

Stammering and stuttering have been used synonymously, but there is a difference. Both are manifested in the vocal and enunciative organs, causing a hesitancy and difficulty of utterance. Stammering is the inability to utter a word,—holding the breath. Stuttering is a repetition of words. The organs meet and rebound again and again in reiteration of syllables before words can be formed. The source of this trouble is principally in the lower jaw, but by proper exercises and by training this organ stammering can be controlled and speech conveyed perfectly. Stuttering is generally accompanied by some

degree of stammering, and while generally considered different, they mutually aggravate each other.

Stammering is more of a mental trouble, originating in a lack of coördination. The mind acts faster than the vocal organs can obey. That stammering is of mental origin, can be proved in many ways. The evidence of the difficulty however is physical amounting to contractions of various muscles.

I have in mind a stammerer who not only is troubled while speaking, but also manifests her stammering in playing on the piano, and in writing. There are times when this unfortunate one can speak quite fluently and perform well on the piano (when she feels well and cheerful), but, if she is ill, or if her spirits are depressed, the stammering affects both her speaking and playing. She writes rapidly, but her thoughts come fast, causing a confusion in writing. Frequently she leaves out a letter, or makes only part of one, for example, in writing *w*, she may write it *woh*, etc. This occurs more often when she is writing at length or is merged in deep thought. By this it is evident that the hand, in trying to keep pace with the mind, falters, or rather the mind, in burdening itself with so many thoughts at one time, becomes confused and guides the hand in a like manner.

With speech this confusion is greater as the mechanism and actions of the vocal organs in their relation one toward another is more complicated than the mechanical actions of the hand.

The aim of the stammerer is to overcome or correct his difficulty, and the first step in this direction is accomplished through maintaining good health by obeying the laws of health.

Our physical and mental organizations are a sympathetic whole, so closely related that the slightest disregard of the one will find a corresponding sympathy in the other; therefore, we should endeavor to maintain a perfect equil-



ilibrium between mind and body. Self-control is another potent factor in a cure for stammering. This control is not acquired in a day, but by patient and continued effort. Take one thing at a time and quietly but firmly resist the temptation to do that which you know would be injurious. After one victory has been won, the next will be easier.

By control we do not mean only the outward control of the body, but of the muscles, emotional and mental faculties.

The stammerer should constantly bear in mind that fear, anger, worry and excitement are among the most dangerous foes to fluent speech. To frighten any one, especially a little child, amounts almost to sin. Fright shocks the nervous system, the breath comes in gasps, the equilibrium is destroyed, consequently speech is impaired.

The acquirement of the power of speaking begins early in life, and it is often that the stammering habit is formed at this time, in mismanagement of the breath and vocal organs; made habitual before the powers of reason and observation are developed.

Some of the worst forms of impediment are due to the want of proper direction in producing the elementary sounds, when children fail to speak them correctly by natural imitation; by patient training and right methods by the parents or teachers, the children may be taught to articulate plainly and slowly.

Parents too often put off the attempt to correct the impediments of speech in their children, with the hope that the defect will disappear as the child grows older and stronger, but this hope is scarcely ever realized, and the habit is formed, which from constant practice grows stronger and stronger, and perhaps results in hindrance to education. To remove this habit, much depends on the acquirement of voluntary control over the mechanical agents of speech, also on the cultivation of correct speaking, which can only be accomplished by studying the process of speech, the relation of breath to articulate

sounds, the position of the tongue and other vocal organs in forming the outward stream of air.

All sounds originate in the throat and all effort in speech must be thrown back behind the articulating organs, which must be kept passive, yielding to the air, always opening to give it exit and never resisting it by ascent of the tongue or of the jaw. The head must be held firmly on the neck, to give free play to the attached organs, and the great principle must never be lost sight of, that speech is breath, and that while distinctness depends on precision and sharpness of the oral actions, fluency depends on the unrestrained emission of the material of speech—the air we breathe.

From the foregoing, will be seen the necessity of restoring normal breathing by exercises for that purpose. The highest authorities have recognized the importance of breathing exercises. Many people do not breathe deeply enough. In deep exhalations the impure air from the lungs is sent out, while deep inhalations fill the lungs with pure air and purify the blood.

Speaking when breathing properly is a healthful exercise, but violent or long continued effort is harmful to the chest if the lungs are not kept filled with air.

All stammerers should make it a special point to speak slowly and distinctly, as in their haste to get through with what they have to say before they stumble on some word, or to conceal their impediment, their words are jumbled together in a manner hard to be understood, causing the person to whom they are speaking to ask for a repetition of what they have said. The second effort at speaking will be worse than the first, as the stammerer dreads to reply to a question.

One who stammers should cultivate measure and rhythm in all that he does, in speaking as well as in practicing music. The benefit of this is demonstrated by the fact that a stammerer can sing, and read poetry better than prose. Measure also helps to maintain the equilibrium between the mind and organs of speech.

Anything that strengthens the confidence in one's ability will help to promote fluent speech.

One of the stammerer's greatest difficulties is the feeling that he cannot speak, and in realizing this comes nervousness, confusion and embarrassment, which reacts on the organs of speech. Now, if he could realize or bring himself to know that he can talk whenever he wants to, or under any circumstances, his mind would relax from nervous tension.

Exercises, breathing, vocal and physical, benefit the speech by restoring to the vocal organs their right use, the wrong use of which, acquired by habit, causes this feeling of inability when attempting to speak. The mind appreciates the right use of the organs of speech. Confidence in the power to speak comes like a ray of light which grows brighter and brighter with each successful effort in speaking, until the full realization is effected of free and unfettered speech.

## TREATMENT FOR STAMMERING

It is surprising, when we consider the advancement made by science during the last half century, that it is only within the past fifteen or twenty years that any intelligent thought has been given to the cure of stammering. The orphan, the cripple, the deaf and dumb, the insane and the aged have homes provided for them at the expense of the public, but practically no recognition has been given to the infirmity of stammering, the saddest and most deplorable of all afflictions.

The fact that severe cases of stammering are infrequently met with has a tendency to set the sufferer apart from his fellows and to make him an object of curiosity, and, what is often harder to endure, pity.

Ridiculed by his playmates, perchance given but little sympathy in his home, the victim of stammering finds himself even in his childhood cut off from partici-

pating in the pleasures of others. Conscious of his affliction, he shrinks from exhibiting it even in the presence of his associates and, in consequence, he withdraws more and more from society and broods upon his infirmity. Thus what might have been merely a physical trouble develops into a deep-seated mental disease. Nervousness and embarrassment greatly increase the difficulty and children who are roughly treated at this stage often become nervous wrecks.

If it could be impressed upon the minds of the parents of stuttering children that kind and sympathetic treatment in the home would do much toward effecting a cure, many cases of stammering would be wholly prevented.

Stuttering is not infrequently met with in nervous, highly organized children, and in some cases may be ultimately overcome by intelligent home-treatment. But if the child's attention is constantly drawn to the defect, if he is scolded for his hesitancy and obliged to say words which are difficult, the mental complication is apt to follow.

If possible, the stuttering child should begin his education at home. A competent nurse or governess and later on a private tutor should be employed for that purpose.

However, if the circumstances of the parents are such as to make this impossible, and the child must attend a public school, if any, the mother should make the teacher her confidant. The teacher's interest aroused, she will coöperate with the mother in his training. The school children should not be allowed to ridicule or mimic him. Children naturally imitate any peculiarity of speech, and if they do this, they not only increase the sensitiveness and humiliation of the stutterer, but acquire the habit themselves. A little watchfulness on the part of the teacher will secure obedience in this respect. Children's sympathies are very ready, and once they are enlisted in behalf of the little unfortunate, and they understand why they should be kind, their thoughtfulness will be very noticable. He should be kept from association with other



children who stammer or stutter, and if there are such children in the school they should not be permitted to sit near, or to recite together. Do not encourage too close application to study. As the brain develops and begins to grapple with the problems of life, consciousness of his infirmity will increase. Stuttering children are usually very bright and delight in study. The mind should be developed gradually and any agitation should be avoided.

Much attention should be given to the building up of a strong, healthy body. If there is a gymnasium in the school the stutterer should belong, and he should have his playroom at home fitted up with such apparatus as will help him to develop and control his muscles. Simple physical exercises, followed by a cold bath, should be taken every morning. The reason for this is apparent. Stammering, it is conceded by authorities on the subject, is caused by the muscles of the body refusing to act in response to the dictates of the mind. Thus it naturally follows that such exercises as tend to increase the power of the mind over the muscles, must necessarily help to correct defective speech. As the child becomes interested in his physical exercises his mind will gain more and more control over his muscles. The development of will-power, will also serve to assist in the control of mind over the organs of speech. He will have a healthy body and a bright, clear mind as a reward for work which is a real pleasure to him.

A correct breathing habit is most important. With the physical exercises should come breathing exercises to develop the organs of respiration and increase the capacity of the lungs. Vocal exercises, for the same reason, and also because they strengthen and mellow the voice, should be included in the drills. Teach the stuttering child to speak slowly, never in a hurried, excited manner. Before speaking, he should take a deep, full breath, and then speak slowly and in a modulated voice, and never after the air in the lungs has been exhausted.

All children should keep regular hours, and have plenty of sleep. This is absolutely necessary in cases of stammering and stuttering. The mind and nerves need rest and nothing builds them up as quickly as natural, restful sleep.

Care should be given to the diet as well as to the manner of eating. Highly seasoned foods and both coffee and tea are injurious. Food which is easily digested and which builds up the nerves and muscles should be provided. Eating slowly, moderately and at regular hours, is important.

In caring for the child's physical needs the parent should not forget the important part a cheerful home atmosphere plays in the life of the child. Make the home at all times "a haven of rest." Only those who stammer or have stammered, can realize the agony of mind, the humiliation and misery of the stammerer. Parents who do not stammer and who have stammering or stuttering children must constantly guard against betraying any impatience, no matter how trying the circumstances may be. Stammerers are abnormally sensitive and should never be treated as objects of pity, nor, on the other hand, should they be petted and indulged because of their affliction. In fact, the kindest consideration that can be shown a child who stammers is to seemingly ignore his impediment. Treat him kindly and firmly and in all respects as you would the normal child. Such children are usually active and energetic, and need quite as much discipline as the ordinary child. He must not be punished because he stutters or his stuttering made an excuse for not punishing him, when his misbehavior merits such measures. Stuttering children are easily conquered by appealing to their better natures, however. At the best, they are shut off from much of the brightness of life and readily appreciate gentle treatment.

The writer does not attempt to prove that *all* children suffering from defective speech can be cured at home.

It is a fact, however, that all such children would be benefited by the treatment here briefly outlined. All authorities on stammering agree that many of the worst types of stammering might have been cured by just such simple exercises as have been mentioned, had they been practiced faithfully in early childhood.

Parents, wake up to your responsibility! The subject merits your thoughtful consideration. Do not indifferently fold your hands and wait for your child to "outgrow" his stuttering. He will never do it. Make a study of the subject. Read all you can and gain what knowledge you can by observation. Begin by teaching him to breathe properly; to speak slowly and correctly. Give every attention to his health. A strong, healthy body is a good foundation for cure. Study his individual case. Children differ so widely no set rules can be laid down for all cases. They must be elastic enough to be adapted to the individual. The parents, themselves, if they make a study of their child's disposition and peculiarities, will know intuitively what measures are needed.

If, after having received intelligent care in the home, the child reaches his tenth year and is still a stutterer, or, perhaps, by this time a stammerer, the parents ought not to longer postpone sending him to an institution established for the purpose of treating such afflictions. If he is not cured by his tenth year his case will probably never yield to the simple exercises that can be given at home, and it is now imperative that he be placed under the care of a competent instructor who has devoted his life to the study of such diseases. Parents should not neglect this, or allow anything to stand in the way of giving a child the best treatment obtainable. No sacrifice is too great to save a child from the horrors of a life blighted by the saddest of all afflictions— stammering.

## THE EXPERIENCE OF A STAMMERER

While scientists are endeavoring to make a distinction between *stammer* and *stutter*, and confine to each the slight difference they establish, popular usage has made them synonyms.

Referring to the philology of both, we find *stammer* to be a pure Saxon word, but closely allied to the Icelandic *stamra*, to be silent, while *stutter* is traced to the German *stottern* and Danish *stooten*, to stop. So far as the origin of the two words is concerned, the non-scientific mind may use them interchangeably without challenge.

It has been claimed that a stammerer will always show his defect in singing, while a stutterer will not. I have always been able in singing to enunciate the words perfectly, and without the least trouble. It seems curious that, out of a family of six, I am the only one able to carry a tune. Some of the others can hum correctly enough, but cannot sing.

I attribute my defective speech to ill-health in childhood and to the consequent derangement of the nervous system. When a youngster of four or thereabouts, I was struck on the ankle by a croquet-bali. This caused an injury to the bone which made me an invalid for six months. Two years later I had to lie for another six months with hip-joint disease, and shortly after that had an attack of measles. I stuttered slightly after the former trouble and after the measles it became more noticeable.

Naturally of a nervous disposition, illness and isolation developed this to a high degree, and the more ill at ease I felt, the more I stammered. If I had to ask or answer a question, it was much worse than when I spoke without premeditation. This was also the case when anyone tried to help me out with a word or to hurry me in speaking.



But if a friend did not appear to notice my impediment, or spoke of it as if it were a mere nothing, I could talk without much trouble; while the more notice was taken, the harder it was for me to speak.

No one was ever so cruel as to mock or imitate me. If one had, it would have been still more difficult, and instead of my affliction becoming slighter, as will began to dominate nerves, I should have had much more to contend with. I advise all young people, for *their own sakes*, on no account, mock or imitate those who stammer, for in my observation, it is a trick easily learned but harder to lay aside. Imitating a fellow-schoolmate just for fun, made one boy a miserable stammerer for life. His victim, by help of a wise and patient teacher, overcame his failing entirely, but the mocker found it impossible to get rid of a habit begun in fun.

I have always been treated kindly and patiently by most of my schoolmates and especially by the teachers. When I left home for college, some friends told my mother that I would not stay a week on account of the boys teasing and laughing at me. I went expecting to be ridiculed, with my mind made up to bear all, and not go home till the usual time, but only on one occasion did any boy refer to my stutter in an unkind way, and I was astonished to hear all the other boys shout, "shut up." I have always thought that some one of the professors must have said something to cause them to treat me with so much consideration.

But if the boys did not laugh at me, I had plenty of trouble in other ways. My impediment kept me from taking part in any public debate, and at a social gathering I always imagined that people did not want to hear me, or rather see me, try to talk. This always made me worse, in fact sometimes I could hardly utter a word in company, whereas if I had not thought about it, I could have spoken with comparative ease. At home I could take the chief part of the conversation without any trouble—sometimes I would stutter, sometimes not at all,

and they all gave me credit for being able to hold my own in a very talkative family.

Weather, too, seemed to affect me considerably. During a long draught, I would be almost free from any inconvenience whatever, but the rainier the season the more hesitating my speech. This seems to agree with the theory that stammering is an affection of the vocal and enunciative organs—still, it has always seemed to me that could I get entirely over my nervousness, my trouble would be gone, and this makes me inclined to believe that a wise and careful teacher could accomplish the same end by a judicious system of enunciatory and respiratory exercises—for if I once had perfect confidence in my own ability to talk as others do, the nervousness would cease.

I also found the defect a great drawback in my choice of an occupation. Professions were out of the question, every one towards which I had any leaning required a fluent tongue. The same was true of business—a ready tongue to sell or barter was the chief requisite. I had no taste for art, literature or desk work as a means of livelihood, so my choice was limited indeed.

Circumstances led me to fruit-growing, and I have no doubt that the outdoor life helped me greatly, though it would have done me much good could I have mingled more with city-bred men, and had the opportunity to imbibe some of their easy address. Many times as I grew older I flattered myself that I had made some progress in remedying my defect, and that it would soon be conquered altogether. Then trouble of some kind would come along and the worry would leave me almost where I was before. Still, I do not stutter nearly so badly as I did, for I can sometimes carry on a conversation with strangers without the least trouble, but the more I fancy they notice it the more embarrassed I become, and the less able to control my speech.

A lady once said that a winter in town would cure me entirely, as it would enable me to be so constantly meeting with strangers that the fear of comment, with its con-

sequent embarrassment, would soon wear off. But I have been told so many cures that, if successful, there need never be a stammerer left. Most of these cures were by hearsay; not one of the parties could tell the cause of the stammer, but all could advise as to the treatment. Why is it that nearly everyone can tell how to heal a disease and cure a failing, provided they have never had anything to do with it themselves? It reminds me of an old gentleman whose horse was sick, and the neighbors came trooping in to prescribe; one advised one thing as sure to cure, another brought something totally different which he was equally sure would be a certain cure, and so on until the owner became bewildered. Finally he said, "Gentlemen, just tell me what the matter is, and I'll easily find out how to cure him." Not one could diagnose the poor horse's disease correctly, or, indeed, at all. I sometimes wonder if I had been minus a limb, how much information I could have received towards growing a new one.

It is said of Canon Kingsley that while he stuttered badly in private talk, in pulpit or on platform his speech was unfettered, and he spoke fluently and well. I have noticed people quite free from this defect on ordinary occasions, stutter badly if called upon to make an unaccustomed speech, or if they lost their tempers would be quite unable to complete what they wanted to say. But I never yet heard of the man whose stutter prevented his swearing as readily as he wanted to. Some seem able to tumble out the oaths so fast that it seems a pity they are not entirely tongue-tied in this direction. I have no doubt that such was the opinion of the good ladies who gave a supper to the sailors of a certain port. The latter put up one of their number to make a speech of thanks. He commenced easily enough, but soon began to falter, then stood silent, unable to utter a word, while his face twitched and his lips moved in such a ludicrous way that another sailor sitting near began to grin and laugh. Thereupon the thought of the first underwent

a change, and turning to his comrade he cursed him roundly and fluently.

In spite of the general forbearance and consideration there are still those who think this a good subject for practical joking, and a story which raises the laugh by relating some trick played on the stammerer is considered good fun. A man lounging on the sidewalk of a small country town was accosted by a stranger who stammered and asked, "Please, sir, will you tell me where to get some matches?" He directed him by a roundabout road to the store, then quickly took the shortest way himself. Getting there he asked the storekeeper, "Have you any m m-m-matches?" After carefully inspecting them he said, "I didn't want any m-m-m-matches," laughed, and walked out as the stammerer was passing in. When the poor stammerer asked for matches in exactly the same manner, he was requested in language more forcible than polite to leave the premises, and on attempting to speak still further was summarily ejected by the angry merchant, who thought it was a trick planned to make a fool of him.

One authority asserts that as a rule stammerers are of feeble intellect and possess weak bodily powers, but such has not been my experience. I have at present working for me a man with two sons and all three stammer; the man is as intelligent as any in the neighborhood and very superior to the average farm hand, while the boy who stammers worst is the brightest of the family and a quick, efficient worker.

As to bodily strength—since I outgrew my early weakened condition, I am healthy and well.

For the last fifteen years I have taken a full share of all the farm operations—clearing, fencing, ploughing, planting, harvesting, hauling, shipping, building, stock-raising, even well-digging—and I find few men who can outdo me in vigor and endurance. In our berry season I am at work from 5 a. m. till 12 or 1 o'clock at night, day after day, yet I can do as much or more than my hands who work their ten hours and then go home to supper and bed.



While I cannot vouch for the accuracy of every detail, of the story I am about to relate, it being a good many years since I heard it, yet the substance, as follows, is correct:

Somewhere in Wales (I believe it was), there was a Wesleyan station which gave the worthy brethren of the conference much anxiety, and no small amount of heart quakings, the cause being that a brawny blacksmith in that vicinity, a most irreligious man and notorious swearer, having been reproved by the preacher, vowed that Methodist service should henceforth be abolished in his neighborhood, and gave the poor parson such a "drubbing" as caused him to resign the charge in fear of his life. A new man was at once appointed, but the blacksmith met him on his way with a volley of curses and such terrifying threats that he deemed discretion the better part of valor, and meekly retired from the field. The smithy commanded the approach to the village, and every stranger who passed was interviewed by its owner. Preacher after preacher took the field, but none could withstand the doughty blacksmith, who did not scruple to use violence where the gentler method of threat and oath failed to convince them of the futility of resistance. Conference held a gloomy meeting. Not even the inducement of extra good pay could persuade one of the worthy brethren to risk his reputation and his bones with such an antagonist. In fact, when a call was made for a volunteer to this particular circuit, silence reigned. At last, up from the further corner rose a little, spare man, meek-faced and soft-eyed, one who always was given the hardest work and poorest paying stations, and only got them because no other brother could possibly live upon the meager pay. He stammered very badly, but ridicule and well-meant advice had not deterred him from following his chosen work. In words, even more hesitating from the excitement of the moment, he asked that he might be appointed to the station in question.

"You," said the bishop, and the monosyllable exactly

expressed the thought of all present. "There's no one else, brother," stammered the little man apologetically. This was an unanswerable argument, so Brother \_\_\_\_\_ was duly appointed. The following Sunday he was riding pleasantly along the road which led past the smithy, enjoying the morning, when a loud voice called, "Halt." It was the blacksmith, furious at the thought that his enemies had returned to the field.

"Where are you going?" he demanded. The rider indicated the chapel with his finger.

"What for?" was next asked. "To preach, brother," stammered the preacher with a rising inflection on the last syllable of his sentence.

"No, you're not," said the blacksmith.

"O, yes, I am," said the preacher.

"Go home," said the blacksmith, "you puny, miserable, stammering bag o' bones. Haven't they told you what I do to the preachers that insist they're going to preach—I make 'em see stars, I tell you."

"Do, you?" stammered the preacher. "Well, I'm going to preach, brother, and you're coming to hear me, brother."

Thereupon the blacksmith swore dreadfully, calling down all manner of vengeance on himself, did he ever darken the doors of a Methodist chapel.

"Brother," said the preacher, "it's wicked to swear."

This so enraged the blacksmith that he cried out to the preacher to come down and he would make mincemeat of him.

"With pleasure, brother, let me tie my horse first. He might get away," stammered the parson.

The blacksmith consenting to this the horse was securely tied, and the preacher, laying aside his coat and turning up his sleeves, signified that he was ready. His opponent aimed a terrible blow at him, but the little man dodged under his arm. For a time he kept on the defensive, running around the blacksmith, dodging in and out, seeming everywhere, yet nowhere, while futile blows beat the air. Suddenly he changed his tactics, and took the

unwary blacksmith full in the face with a blow which caused him to stagger, and ere he had recovered his footing, the blacksmith was deftly tripped up, and found himself prone on the ground with his adversary seated on top of him. The smithy tried to shake him off, but to his surprise was held as in a vise while merciless blows rained upon him.

"Do you see stars, brother?" stammered the parson.

"Let me up," roared the blacksmith.

"Promise to let preachers alone henceforth, brother," pounding away vigorously.

"I promise, let me up, I say."

"Will you come to hear me every time I preach, brother?" Having given the required assent, the blacksmith was allowed to retire from the conflict with the preacher's assurance that if he did not come he would "see stars" again.

History adds that the vanquished blacksmith became the first convert of the victorious, if stammering, preacher.

## WHAT IS STAMMERING AND HOW CAN IT BE CURED?

Before a cure can be effected for stammering, it is absolutely necessary that the instructor or teacher should thoroughly understand the case, and that his method of treatment be practical and founded upon an educational basis.

Eminent scientists have defined stammering as "the inability under certain conditions, to articulate, or control the organs of speech which are usually, under such circumstances, tightly held together, accompanied in many cases by the substitution of one sound for another," and in their method of treatment, the pupil is made to go back to the fundamentals or beginning of speech and form his voice again, as the baby forms its voice when it first begins to speak.

In the beginning of a sound the air in the lungs, while on its way from the trachea to the pharynx, passes through an inverted box-like cavity, at the top of which is a little opening called the glottis, the opening between the vocal cords. As the air rushes between these cords, which are drawn closer together according to the tone, a sound is produced; but this of itself would make no intelligent speech were it not for the fact that as the sound proceeds to the surface, by the action of the tongue, lips and other articulatory organs, it is changed to articulate speech. But the defect of speech, known as stammering, lies deeper than would be supposed. At the moment when the impulses sent by the brain move to action the air in the respiratory canal, there is a lack of coördination between the two actions, which is outwardly manifested in a hesitancy, often accompanied by horrible contortions, rolling of the eyes, and sometimes speechless intervals. Some stammerers when before strangers can, by exercising all their will power, speak very well, but while the physical defect has temporarily ceased, the mental torture is something terrible, and after the conversation is over the nerves are all unstrung and the breath, strength, and vitality completely exhausted. Such a case gives evidence of a genuine type of stammering.

Many years ago stammering was attributed to malformation of the vocal organs, and a surgical operation was resorted to as a means of cure, which would temporarily cause fluent speech; but after the sore had healed the stammering would be just as bad, if not worse, than before, with one more cross added to the stammerer's already heavy burden—a mutilated tongue.

If stammering was due to any such cause it would be manifested in a kind of lisping, not in the horrible contortions and the way in which a stammerer sometimes holds himself with his mouth distended like a funnel and the air slowly escaping, while he is unable to utter a sound.



The defect would also be manifested in whispering or singing, while under ordinary circumstances the majority of those who stammer can easily perform either of these actions without hesitation.

Although not the cause of stammering, nervousness is an aggravating evil which plants its claws more firmly into the victim the older he grows and the more sensitive he becomes of his defect. When in a nervous state the stammerer has less control of his speech than under ordinary circumstances, but, if nervousness was the cause of stammering, it would first have to be eliminated from the system, and then there would be no stammering, whereas in the method now used, the stammering is first eradicated, and then the nervousness disappears. Many other evils have also helped to increase stammering, and add misery to many a life. Alcohol and tobacco, stimulants with their effects on the nervous system, cause much control of the articulatory organs to cease, and, of course, when these become uncontrollable, stammering will temporarily become worse, and if the practice is continued the nerve-endings are blunted and the malady, if in a slight form, rapidly develops into a most severe type of speech disorder. Other aggravating evils of stammering are indigestion and loss of sleep. In breathing, the air should be forced to the very smallest air cells in the lungs, for besides aiding speech, respiration helps circulation, and unless the blood is perfectly purified and free circulation afforded, the body becomes diseased and unfit for the work which a stammerer is going to undertake, namely, a cure. If one is suffering from indigestion, how can the air be forced deep into the lungs?

Since the age of almost savage life, when our eyes were blinded by the frauds thrust at us by inhuman pretenders, stammering has been more correctly defined and the method of cure applied has in the majority of cases proved successful. Owing to the many different kinds and causes of stammering, it would be impossible for one to lay down rules which would prove entirely satis-

factory, but every stammerer, who is contemplating any home treatment may, after he has fully studied all the strange and intricate parts of his defect, form a set of rules which would most likely fit his case, and if carried out faithfully would more than meet his expectations.

We should, before entering a stammering institution, strengthen our vocal organs, so that when we begin such work the task will be easier, the time required shorter, and the results much more satisfactory.

To accomplish this we should follow certain rules, a few of which I give following, which if practiced faithfully and carefully will aid us greatly in our efforts to gain strength:

- 1.—Take deep breathing exercise daily.
- 2.—Take gymnastics to develop the whole body.
- 3.—Cultivate a cheerful and happy disposition, which will quiet the nerves.
- 4.—Keep your mental equilibrium under all conditions.
- 5.—Hold yourself in equality with all men.
- 6.—Always talk slowly and deliberately.
- 7.—Never let your temper get the better of you whether scoffed at or rebuked.

Reliable institutions for the cure of stammering have not been in progress more than fifteen years, and the work of destroying the ideas and method of quacks and professors is very hard, but when we think of the rapid strides of science in this direction we are surprised. Let us all hope that these new methods will become more wide-spread and every one be able to say, "I am of a free and understanding tongue," not as the leader of the children of Israel said, "I am slow of speech."

## PRACTICAL ADVICE

Having experienced in a slight form the unpleasantness which invariably accompanies any impediment of speech, I will offer in a crude way the knowledge gained from that experience, and will give ideas that I know to be beneficial.

In the first place, when a child begins to talk, if any disposition for any impediment of speech is shown, great care should be exercised in trying to keep its mind from dwelling on this point, for if it once gets so centered, it will develop into a chronic case of self-consciousness, and if my observation is correct, it is the cause of the greatest part of this difficulty. A person who is proof against sensitiveness will seldom, if ever, be afflicted with stammering, while those who are affected in this way are so painfully self-conscious that their sufferings are extremely pitiful. When he begins to talk, the stammerer's one thought is whether he will get through without causing himself any embarrassment, and every word he says or tries to say he will become more excited, until at last his nerves collapse, he loses control of the muscles of speech, and is at a standstill.

If he would watch other persons speak and see with what ease and sense they enunciate their words, and what a complete lack of anxiety they show as to whether they can speak or not, he would consider himself foolish, to know that he suffered such needless anxiety. Woe to those who help to infuse such a lack of self-confidence into an innocent child, and place him in such a position of misery! What a conquest is necessary before they are able to fill a place of usefulness in the world by the side of their fellowmen! What an amount of patience they exercise in looking forward to a day when they may be

able to converse without being an annoyance to others, and a source of misery to themselves!

There are comparatively few women afflicted with stammering, and it is a blessing that such is the case, for, however hard it is for a man to make his way in the world, it is more difficult for a woman, without being tortured by such an ever-present misery as stammering. The most essential thing in self-improvement is to cultivate a spirit of confidence. Think that you are capable of doing everything good if you so desire. Be conceited about your ability. It will do you no harm, and the lack of self-confidence will injure you. Do not let a thought which is detrimental to this spirit enter your head, and try to overcome all feelings of diffidence and timidity.

When you feel you have conquered these failings, then begin taking vocal exercises, reading aloud, and practice also breathing exercises. Accustom yourself to the ways of others, try if possible to eliminate any nervous anxiety and banish the fancy that you are the amusement of every one who talks to you.

When a stranger or any one speaks to you, place your mind on the words spoken, and not on the words you are to speak, and you will answer in your own words before you know it, and at the same time you will be free from that miserable worry and fear which accompanies such an eager effort. Try to be at ease, and watch and see how unagitated your neighbor is when speaking. You can be the same if you will, but it must be your will to do so, else the desire be useless. Do not try to be talkative until you have perfect control of yourself, which will take a great deal of practice and a reasonable length of time.

Be cautious without being anxious, when you are speaking, and if you feel you have not entirely assumed control of the muscles governing the organs of speech, and especially of any particular sound, try to avoid using words containing those sounds, and supplement them with synonyms. I do not think it advisable for any one



to let a child who stutters attend school and be forced into giving oral recitations, only to make a ludicrous failure to the amusement of his schoolmates. No one possessed of ordinary common sense cares to be held in small esteem by his associates; while the stammerer's friends may pity him in his efforts to be agreeably conversative, they cannot devote more than a limited amount of their time to him, and that amount decreases when it becomes evident that their company is embarrassing. A child in this position is practically without friends when he reaches maturity, and the best part of his life is gone.

To all those who have a poor opinion of the stammerer I will say: For the sake of Him who made them so, if not for their own sake, be good to them. Place no obstacles in their way, and do nothing to embitter their feelings, for that is one instance where an insinuating word goes forever forgotten. God knows that he placed in the pathways of those who stammer more thorns than could be trodden on in time to have the wounds heal before death, and any one casting an extra stone, only kills the one at whom it is cast.

Any one conquering this cruel habit and securing a place of creditable notoriety in the world, is truly a victor as well as a benefactor.

It is a pity that children suffering from these ailments should be left in the care of any but a strictly conscientious person. Their nerves are so tried by the useless coaxing and threatening that they are in a state of constant misery, and as many years as it takes to lower the nervous system into that terrible downward, unhealthy channel, as many years will it take to bring it back to a normal condition. Stammerers who consider themselves a burden to their associates or relatives are naturally frequently disheartened, and this feeling of dull despair which momentarily overcomes the mind, is a detriment to any healthful person, a feeling which should be avoided.

If all stammerers would refrain from talking at those times when they feel the least ability to talk, and exercise

no muscles of the vocal organs until they are able to exercise them properly, they would do themselves a great deal of good; it would prevent the undoing that aggravates their natural weakness. As a rule, it is at this time that they feel most inclined to talk.

One great fault of many who suffer from defective utterance is that they are too pessimistic. Everything, no matter how bright, is viewed through the mental smoked glass, which casts that monotonous shade over everything.

That melancholy way of viewing the blessings of God is intolerable, and even if God has made the person with defective vocal power, he has certainly blessed him in other ways, in a way perhaps more important in the end than the gift of utterance.

It can be overcome, and must, if the person who thus suffers ever expects to have a reasonable peace of mind. The stammerer should have some great purpose in view. Be ambitious, aspiring and never be contented. Be strong in your determination to govern yourself, and cultivate a stout heart. There is no need of suggesting the cultivation of a sympathetic feeling, for that is yours by nature, and although it is a very God-like, human expression, there is a possibility of its over-cultivation.

Do not consider stammering any disgrace. It has already been shown to be no evidence of weak-mindedness, and as it is not the result of sin or crime, there is no reason for anyone to feel despirited over it. If it is necessary to do so, ignore the remarks of anyone, even of your relatives, and do not let their insinuations affect you in the least. No one knows of your difficulty but those who have secured the knowledge through experience, and there is no danger that they will ever cast insinuating remarks with the intention of injuring your feelings. Few faults are less sinful than yours.

## SUGGESTIONS FOR THE STAMMERER'S BENEFIT

The gift of speech is man's supreme distinction. Nothing in culture can exceed the importance of speaking well. Its use in the common everyday intercourse of life makes up a large part of the intellectual activity of the race. The ability to converse intellectually and elegantly is one of the greatest accomplishments.

Alas! Many are unfortunate in coming into the world with weak or defective constitutions; others through accident or disease have had the powers of their bodies impaired. To this class, the mimic excepted, the stammerer belongs. It was formerly conceived that stammering or any other malady was caused by the evil spirits, which were supposed to have entered the body and deranged its actions. Hence it was said of the dumb, that they had a "dumb devil." Incantations, exorcisms, etc., were resorted to in order to drive them out. It was thought by others that the disease came arbitrarily, i. e., by will only, or as a special visitation of an overruling power, and was to be removed by fasting and prayer. Science teaches us that disease is not a thing, but a state or condition. When the organs work in perfect harmony the body is well; but when any derangement of the functions occur something must be done to bring that part to its normal condition, or the body will suffer.

Stammering is due to an abnormal condition of the faculty that controls the vocal apparatus, and not to any organic defect. It will not be necessary, therefore, to dwell long upon the structure of the sound-producing organs, for they are perfect from the fact that they are capable of vocalizing any sound. This signifies that stammering is a functional defect. Vocalization is produced by bringing the stretched edges of the vocal cords close

together and parallel to each other, leaving a very narrow slit between them, and while in this position, forcing a current of air past them. The difference in sound is made possible by the arrangement of air cavities about the vibrating parts. The sounds represented by the alphabet may be separated into the following classes: those that depend fundamentally on the vibrations of the vocal cords; and those in which the vocal cords take no part, but depend upon the rushing of the air along the upper air passages. The first class includes the vowels and sub-vowels; the second, the remainder of the sounds of the alphabet. It is obvious that in producing a vowel sound, the air escapes unhindered through the mouth. In making the sub-vowels, the mouth passages are more or less obstructed, the escape of air being more or less through the nose. It would be profitable for the stammerer to stand before a mirror and study the movements of the parts engaged in making each sound represented by the different letters and combinations of letters.

One can improve the tones he uses by taking care to hold his body in the proper position for their production. What that position is, he can easily find by experimenting on himself. Seek to make the tones always smooth and musical, never losing sight of the fact that what is wanted in the every-day use of the voice is a pleasant and natural intonation.

All improvement in the tongue of the speaker is like improvement in the hand of the artisan, or the eye of the painter—the gift of habit. Practice makes habit and “habit becomes destiny.” The Almighty gives us the power to form habits that we may crystalize victories. The stammerer’s first aim in life should be the eradication of his affliction, and having the power of habit by practice in mind, he should seek to acquire that free, easy, graceful speaking ability. He should try to attain the soul of refined manners, namely, good-will towards others and a desire to secure their comfort and happiness.

The grouping of stammerers into various types is very



near impossible, for every stammerer seems to have an original method of manipulating his vocal organs and features.

Stammering is an affliction that most people do not fully understand, and it is for this reason that the stammerer has to hear the brunt of his misfortune, disappointments, and embarrassments. It has crushed out the ambition of many people, where ambition finally yielded to fate. This creates a feeling of despondency in some, thereby holding their attention the more to their unhappy state, consequently aggravating their impediment. On the other hand, there are historical examples where speech impediment had decidedly the opposite effect upon the afflicted; for it is as natural for some people to fight against their fate, as it is for others to submit to it.

I believe there is hope for all who really try to better their condition and go at it in a systematic way, for system is of vital necessity. There are some who seem to be inert and not alive to their condition, and who do not make the effort that they should. The stammerer should not be content to be a mere "dummy in the band-wagon." Individual success comes only through patient investigation of principles and a careful attention to detail in planning and executing. No progress can be made except at the expense of time and labor spent in practice, letting not home surroundings and employment interfere with the task. One must apply himself industriously, punctually and persistently at it.

The practice of deep-breathing every day is a therapeutic measure. A straight spine, unusual lung power and improved capacity for mental and physical labor ought to be incentive as a reward for this practice. The practice of loud and sustained tones is a splendid means of improving the voice, but it is to be the exception, not the rule in ordinary practice; yet the softer tones must be elastic and full of life; not dull and leaden.

The first step in the cure of any malady, is to obey the law of health that has been violated. Whatever the rem-

edy might be, it is not to destroy the disorder since that is not a thing to be destroyed, but it is to hold the deranged action in check, while nature repairs the injury and brings the system again into harmonious movements. In the first place, one should fill himself with confidence in his undertaking. Formulate a few fixed rules and strictly abide by them. Practice articulate reading, uttering each syllable with a very slow, measured tone. Much benefit is derived from reading a few lines each day to some member of the family and noting the improvement from day to day. It will be of further aid to keep the attention upon the manner of delivery. Avoid coffee, tobacco, strong stimulants and exciting reading. Enough cannot be said against the practice of habits that tend to produce spasmodic muscular action, by affecting the heart, brain and nerves. It is absolutely necessary that such practice be dispensed with. Do not become angry over trifles and do not manifest impatience at any time or speak excitedly. Do not isolate yourself in company by sitting back in a corner, waiting for some one to come and talk to you.

Wear a pleasant face; it speaks much in company. You will gain courage and improve in cheerfulness. Cultivate as much as possible, flashes of silence, when embarrassing positions present themselves. It is the larger half of conversation to listen well, and a closed mouth looks decidedly better than a distorted face.

Whenever opportunity offers, go to the woods, or some unfrequented fresh air place. Here secluded, there is no need to fear intruders, but the birds, and what better auditors would you want? Recite some stirring passage that is familiar to you. Do not be afraid to hollow to your full satisfaction, for it will do you good. It will fill you with good, wholesome, fresh air, that is so plentiful, so stimulating and so essential to life. That suppressed feeling, a longing to be somebody, a desire to say something, has been within; now is the time to sing it out. Begin some extemporaneous talk upon some familiar topic. No matter if it does sound ludicrous, keep on and speak slow-

ly. Let the whistling of the wind, the mocking light laughter of the leaves and the sighing of the boughs serve to make your harangue the more earnest. Imagine the lofty trunks, grand patriarchs who are expecting words of wisdom, and that it depends upon you to have their expectations realized.

Stammering is often due to a method of wrong breathing. To effect a cure in such a case, the patient must learn to breathe correctly and continue to practice. As the respiratory muscles are under the complete control of the mind, one can improve his manner of breathing as readily as he can alter the manner of managing his hands or his gait. Remember to inflate the respiratory muscles on inhaling and speak on exhaling breath. The free and easy expansion of the chest is obviously indispensable to the full play and dilation of the lungs. Whatever impedes it either in dress or in position, is prejudicial to health; and on the other hand, whatever favors the free expansion of the chest, equally promotes the healthy fulfilment of the respiratory functions. Tight stays, corsets and waist bands operate most injuriously by compressing the thoracic cavity and impeding the due dilation of the lungs.

Stammerers are generally victims of fear, or self-consciousness, when in the presence of their superiors. When the fear strikes—take a deep breath, then, without exhaling, contract the chest and dilate the abdominal muscles. This invigorates the circulation of the blood through increased heart action, and thereby stimulates the seat of fear, and, lo,—the fear is past.

By careful and systematic economy of the time, nearly everyone can devote an hour or more each day to the improvement of his speech. In the course of a short time, I believe, real and substantial progress could be made. A gain in speaking ability and self-confidence follows an ebbing of fear or self-consciousness. However, the main trouble lies in the fact that the mind is not capable of controlling the vocal organs properly. In other words,

the stammerer must learn to speak mechanically, and by getting into the habit of speaking so, it becomes natural. The cure is then permanent. For this reason I believe the most economical and practical method of cure is to attend a reputable institution where the stammerer receives proper care. Here, finally, success has been incentive for greater efforts in the interest of the stammerer. Here he is launched into the society, of many so afflicted, who are seeking the same treasure. The potency of free speech is indeed a treasure. Man knows not what God's gifts are till they are taken from him. Yet how trivial ought we to consider our affliction when science has produced a remedy that will oust it; a blessing that has been operated and utilized only of recent years; a remedy that is within reach of all; for industry and economy remove the barrier of penury. How different our lot is when compared with those of former times, who had not the succor that awaits us; but had to submit to the cruelty and uncertainty of surgery. The essentials on the part of the pupil in an institution is obedience and faith in the instructor, together with a liberal amount of ambition to help himself. Lack of discipline accounts for want of order and system, which causes the failures made in the attempts to cure oneself. It is not always pleasant to insist upon strict adherence to rules, but when the success and permanency of a cure vitally depend upon their observance, no concessions should be permissible by the instructor.

The stammerer should be more particular about his health than the ordinary person. Improper ventilation, injudicious exposure to climatic influences, when unseasonably clad, lack of judgment as to how, when and what to eat have been the causes of greater mortality than all the battles ever fought. It is imperative primarily, that the air we breathe should be devoid of all obnoxious substances. No deleterious gases should be permitted to generate and vitiate the atmosphere of the living and sleeping apartments. One should govern his diet upon the nature



of his avocation; those engaged in sedentary work do not require and have not the ability to assimilate the same quantity of solid food as the manual laborer; yet many people make this very mistake, and as a consequence are troubled with dyspepsia, and its many attendant evils. Eat moderately of simple, properly cooked food. Take plenty of exercise. A half hour's walk before breakfast not only helps to arouse the appetite, but gives one the opportunity to drink in the cool, bracing morning air. Eight hours' sleep is quite sufficient; an excess generally has a tendency to dull the faculties. Cultivate an even temperament; do not be too greatly depressed by adversity nor unduly elated by prosperity. A contented mind is the surest evidence of genuine happiness.

Reader, brace up! Look people in the face; hold their eye; if you stammer, stop; be deliberate and try again. Think yourself as good, if not better than anybody else. This will remove the barrier of inferiority that one feels when in the presence of some people.

To the stammerer, this impediment means an opportunity. Can he do better than ask, each one of himself: what use can I make of it? Can I be the means of shutting out the misery from somebody's life? Can I put him on the right track? The publisher of this book has utilized his opportunity by serving the stammerer. The bright future of many depended upon the way he shaped his future. In the light of what has been accomplished by the blending of theory and practice, and of the promise that comes from the state of unrest in which science now exists, it seems a fitting final word to say that the success of the method of cure now employed is indeed a ray of hope to the stammerer.

## STAMMERING AND STUTTERING—CAUSE AND CURE

Those who possess perfect freedom of utterance cannot conceive the mental torture and terrible misery the stammerer has to endure. Let it be hoped that it is due to this fact that the stammerer is subjected to such constant ridicule. The public does not laugh at the blind, the dumb, nor the lame; then why laugh at the stammerer who, in many cases, suffers much more misery than any of the other afflicted? If the public would stop and consider the stammerer's position in life, see how he yearns for sympathy, how, in many cases, he would like to talk about his affliction, and describe his feelings and desires! If he could only feel sure that he would not be laughed at, how much easier it would be for him to express his thoughts. But, instead of receiving that consideration which he so much desires, he receives public ridicule, and is compelled to stand aside, and see others, often inferior in intellect, rise above him. He is ostracized from the social world. In the business world he is told that if he were able to talk he might be of some service. Thus he wanders about, unable to help himself, and, with the exception of a few who have a personal interest in him, is friendless.

While stammering is a mental disease, yet it in no way impairs the intellect, for it appears that people who stammer are, as a rule, as intellectual as those not subject to this impediment.

The most of us are only partially acquainted with the cause of stammering. To thoroughly understand the subject requires a study of the organs used in the production of speech.

Speech is the power of modifying vocal sound by breaking it up into distinct elements, and molding it, as it may be said, into different forms. There are four elements to be considered, viz.: First, the air blast. This brings into action the lungs and diaphragm. Second, the vibration of the vocal cords. This is the function of the vocal cords which are found in the larynx. Third, the resonance of the chest and the cavities above the larynx. This brings into play the pharynx and nasal cavities. Fourth, the articulation or modification of the sound emitted from the larynx, producing intelligible speech. This is the result of the action of the lips, the tongue, and the teeth.

Sound cannot be produced without air, nor can air be obtained for speech without respiration, which latter is due to expansion and contraction of the chest, and the movement of the diaphragm. The chest has a natural tendency to collapse, while its expansion during inspiration is due to muscular action; but the diaphragm is governed more directly by the will. The stutterer never gives this muscle sufficient exercise. Instead of taking long, deep breaths, causing the diaphragm to rise and fall, he takes a short breath, causing the diaphragm to stand almost still. It is due to this cause that the stutterer is often found gasping for air. It should be impressed on the mind of the stutterer that a long, deep breath is essential, not only to fluent speech, but also to perfect health.

Within the larynx, and stretched across it from the thyroid cartilage in front to the arytenoid cartilages behind, are placed the true vocal cords. They are composed of highly elastic, though strong, tissue, and are covered with a thin, tight-fitting layer of membrane. Their edges are smooth and sharply defined, and when they meet, as they do in the formation of sound, they exactly match each other. The space between these cords is constantly varying, not only when their vocal function is exercised, but also during the act of respiration. Every time the lungs are inflated the space increases, to make wide the

entrance for the air, and closes slightly on exhalation. True vocal tones are formed by forcible exhalation. This is done by an effort of the will, which brings the cords close together, under which circumstance they become very tense, the space between them at times being reduced to about the one-hundredth part of an inch. The air from the lungs forced through the trachea and larynx, passing over these cords, causes them to vibrate, producing sound.

Upon the chest and diaphragm depends the force of the exhalation, and after the air has passed over the vocal cords and changed into sound, it is reinforced while passing through the pharynx, and additionally through the nasal cavities. Here it receives its finishing touches, as it were, and is emitted from the mouth as clear, distinct voice.

The articulation or modification of the sound emitted from the larynx produces intelligible speech. Of all the elements considered, this seems to bring out the stammerer's trouble stronger than any of the other three.

Articulate sound is of two kinds, namely: continuous and interruptive. The former embodies the vowels, of which there are five fundamental varieties universally present in speech. Upon the proper production of these vowels depends the distinctness of articulation.

The consonants are the interruptive elements, most of which cannot be sounded apart from the vowels. They are produced by momentary stoppage of the sound current, by means of the palate, the tongue, the teeth, and the lips.

It is when attempting to form words, the letters and syllables of which are commenced by the closing of the lips, that labial stammering appears. This is due to the lips either remaining closed longer than is necessary to form the word, or to the opening or closing of the lips rapidly, producing the same sound over and over again. Lingual stammering is noticed when an attempt is made to pronounce words beginning with letters and syl-



lables formed by the tongue pressing against the roots of the teeth, as *d*, *l*, *s* and *t*. The spasmodic action of the tongue prevents the voice from escaping, causing the sounds to be repeated rapidly.

The inability to enunciate words, the letters and syllables of which are formed by contact between the back of the tongue and the soft palate, is known as guttural stammering. Vowel stammering, which is another type of the difficulty, is caused by the closing of the glottis (the opening between the vocal cords) which prevents vocalization.

The stammerer often sees just where his difficulty lies, and asks himself the question again and again: "How can I help myself?"

The fact that the stammerer often articulates properly is evidence that stammering is curable. There are cases where the stammerer has even cured himself. While this can not always be done, yet there are exercises that, if patiently pursued, will benefit the one who is thus afflicted.

Take a deep inhalation, and on exhalation sound the vowel *a* as low and as loud as possible. This will separate the vocal cords, and at the same time will tend to bring the muscles of the respiratory system under control of the will. Continue such practice, gradually raising the tone. Care should be taken to produce a clear, round and full tone before an elevation of tone is made. This will greatly improve vocalization.

One of the most important features which lead to the cure of stammering is perfect health. This the stammerer seldom possesses. Physical exercise, especially in open air, should be taken, careful attention being paid to the muscles of the chest and abdomen. This not only strengthens the body, but clears the brain, and brightens the intellect. Rest is wonderfully helpful, for while we sleep the faculties which have been working all the time while awake, have an opportunity to recuperate. Sleep should be taken regularly and sufficiently. Cheerfulness should be cultivated and preserved. A cheerful condition

of the mind serves to quiet the nerves; melancholy thoughts irritate and disturb the nervous system. The stammerer should constantly keep in mind the fact that he is equal to or even superior to those about him. From the cultivation of a feeling of superiority he will gradually establish for himself a plane or feeling of equality; his difficulties will consequently become lessened, and better talking will surely result.

### STAMMERING—A WANT OF HARMONIOUS ACTION

Never before in the history of the world was there a grander period in which to live than the present. Good books, institutions of learning, and inspiring influences were never before so abundant as to-day. Civilization the last few decades has made marked and rapid strides on the upward road to perfection. In the realm of knowledge we see an expanding of intellect and a ripening of thought. Science and the arts never offered so much to their devotees as now. The learning of the present is an aggregate of the learning of the past, handed down by literature and speech; man's best and most direct form of communication—speech, that power which distinguishes man from the other creatures of God's hand and enables him to give expression to the most beautiful sentiments and majestic conceptions; speech, the meeting of the mental and the physical.

Let us consider for a few moments the physiological mechanism of this medium of communication, vocal speech. A current of air, as it passes from the lungs to the mouth, is acted upon by muscular movements at the larynx; speech is thus formed. The two terms, speech and voice, are often regarded as synonymous, but speech may exist without voice and *vice versa*. Voice is the effect produced by the vocal membranes on either side

of the glottis, being set into vibration in the same manner as the tongues of an accordin are caused to vibrate. Thus voice may be produced by animals possessing the larynx and vocal cords. In the animal kingdom we find man alone endowed with speech. Speech, which requires a delicate adjustment and coördination of the organs and muscles brought into play in its production, is voice modulated by the lips, tongue, teeth, and palate. Respiration, which plays an important part in the production of speech, consists of two acts: inspiration, taking the air into our lungs; and expiration, expelling the air from our lungs. As vocal vibration, which is the producer of vocal speech, can be affected only by the process of expiration and not by inspiration, we see the absolute necessity of deep or abdominal breathing, and regularity of the respiration, so as to give the lungs a volume of air from which to replenish that making its escape. Speech comes gradually to the young child first learning to pronounce the vowel *a*, the consonants *b*, *m*, *p*, and then their unions, as *ba*, *ma*, *pa*; thus the method of modulating voice into speech is unconsciously learned, the power of expression keeping pace with the expanding intellect. To produce high tones the vocal cords are quickly shortened; to produce low ones they are lengthened, for a prolonged sound they are opened, and for a quick ending one they are quickly closed.

We now approach the question: what is stammering and what are its causes? Observe the stammerer, and a spasmodic movement of the organs and contortions of the features are apparent. The stammerer does not have the ability to produce certain sounds, but a sound foreign to the one intended is emitted, and possibly there is a complete cessation of articulation. Let us turn our attention for a few moments to the closely related speech impediment, stuttering; in fact, the two terms stammering and stuttering are considered synonyms by the majority. In stuttering we have a continuous reiteration of one sound before the next can be uttered, the organs meet-

ing and rebounding rapidly. This defect relates to the physical condition, while stammering is more of a mental disorder—the mind not acting in harmony with the generative organs of speech. The principal cause of stuttering is defective respiration, thus this imperfection more easily succumbs to treatment, but if not cured at an early age it generally develops into its kindred affliction, stammering, especially if the person is of a sensitive temperament, and we have a combined physical and mental difficulty. Stuttering, although not as seated a disease as stammering, more often in its outward effects appears to be the worst defect, probably on account of the contortions, of the features of one thus afflicted being more severe, but the torture of the mind caused by the impediment in cases of stammering is far worse than in cases of stuttering.

“Step by step it leads its victim  
To the verge of dread despair;  
Hurls him o’er the brink of ruin.  
Laughs and leaves him there.”

I, in my earlier days, questioned the value of the life of one thus afflicted; but away with such thoughts, we are of some importance, we must be men and women, we must overcome the obstacles in our path—duty to our God, ourselves, our friends, demands it! Do not drift on and on, aimlessly and without motive. Assert yourself! The underlying cause of stammering has been mentioned; a lack of coördinating influence or motive power, that power which controls nerves and muscles, that power which governs all of the functions that enter into the articulation of speech, perception, intellect, emotion and will.

But there are other factors that tend to impair perfect speech control, to which we should direct some attention. Nervousness is the aggravating source of much difficulty. The question has been asked, “To what extent is nervousness accountable for stammering?”

Nervousness is evidently an aggravation of stammering, and all diseases which cause instability of the nervous



system tend to the formation of that impediment; stammering, however, is more often the source of nervousness. If nervousness were at the root of the evil we would have a larger percentage of female stammerers than males, whereas the male stammerers far outnumber the female.

Often results of great magnitude are found to connect themselves with elements of human nature that appear in themselves as insignificant. Thus the principle of imitation has a vast influence. It is by imitation that the child learns to utter articulate sounds. The child that is surrounded by those who use incorrect pronunciation will speak with incorrect pronunciation, those associated with stammerers will unconsciously have a tendency to stammer in proportion as they are more or less sensitively organized. We should make the principle of imitation work to our advantage, emulating those who speak distinctly and correctly.

On account of the want of harmonious action of the speech functions, the impediment is most noticeable when a transition from one class of sounds to another is attempted. The sounds most liable to mispronunciation are the explosive consonants *b, d, p, t, and k*, while to some the continuous consonants *v, f, s, z, m, w, y, and th*, are difficult.

Stammering has many phases, each one afflicted possessing a type of impediment according to his own peculiar individuality and temperament. In the chronic stammerer we have the worst type, as his malady has been transmitted through several generations and has thus obtained a powerful hold on his entire mental and physical organism, which renders it difficult for treatment. The silent and the boisterous stammerer presents a remarkable contrast. The silent stammerer stands immovable, unable to make a sound, while in the boisterous stammerer there are spasms and contortions of the entire body. In defective constitutional conditions, lowering of the vitality following disease, shock of the nervous system,

fright, ill treatment, etc., we have causes that should not be disregarded.

The life of the stammerer is a sad one; he is handicapped in whatever vocation he pursues. Where other afflictions call forth sympathy, his results in ridicule. He is prevented from enjoying social life, and business pursuits demand men and women who have command of their speech. He is separated from the world and left to his own solitude, his vitality dissipated and his ambition destroyed.

### THE TRIALS OF A STAMMERER

None except one who is or has been afflicted with stammering can realize the position in which the stammerer is placed and the burden he has to bear. He usually receives little or no aid; his friends think that stammering is only a habit, and, like other habits, can be broken. Then, again, the stammerer does not need or want sympathy. Often words which are meant to be sympathetic and comforting only tend to make matters worse by giving the person to whom they are addressed a deeper realization of his terrible disease.

He who has enjoyed perfect freedom of speech during all his life is in no way prepared to offer advice or aid to the stammerer; these suggestions, however, from one who has stammered, are practical. In no manner or on no occasion ridicule the stammerer, because ridicule tends to discourage one in attempting further to overcome his defect; whenever possible appear utterly unconscious that he has an impediment in speech, because this affords less embarrassment to the speaker, and perhaps may even help him to talk more easily.

I know of one stammerer who can speak in public usually without hesitation, especially if she commits to memory what she intends to say. On one occasion she

read an essay in school in the presence of her teachers and fellow-students, and the rendering of her part showed no trace of her impediment. Before the reading began, one student privately made the remark that she did not care to hear the speaker, because she would surely stammer. Her prophecy did not prove true, but, nevertheless, if the speaker had chanced to have heard it, she probably would have become very much embarrassed and confused and would not have done as well. Oh, that people would only remember that such remarks can do no good and that they may do harm, and add still more to the stammerer's already heavy burden! No doubt many such statements are due to carelessness and thoughtlessness, but how much more pleasant the world would be if we all were a little more careful and thoughtful in regard to the feelings and rights of others.

As a rule, stammerers experience the most difficulty when laboring under intense excitement or agitation. They have much to say and their thoughts come faster than they can express them. A wise doctor once said to me, "You stammer because you think too fast."

It was my experience when I stammered that when speaking to a stranger I could so conceal my impediment that the listener would be utterly unaware of the fact that he was being addressed by a stammerer. In fact, I have heard indirectly of slight acquaintances and even of my own school teachers who did not notice my defect in speech until told of it.

Then again, in conversing with any one I found that I could speak more easily when at a short distance from the listener than when close to him (by close, I mean not more than two or three feet away.)

If the person to whom I happened to be speaking did not hear or understand what I said, and I was asked to repeat my statement, it was then usually harder for me to speak than at first.

When I stammered there were only certain letters of

the alphabet which troubled me in talking; with the others I had no difficulty. For instance, the letters hardest to pronounce were *s*, as in *seat*. Another was *l*, when followed by short *i* or *e*, as in *lily* and *letter*.

Often I came across words which contained syllables that were likely to cause me difficulty in pronouncing. For instance, in the word *persimmon*, I would probably hesitate on the second syllable, *sim*. In trying to make the word as easy as possible, I changed the syllables. Instead of leaving the first as it is, *per*, I put the *s* of the second in with the first, making it *pers*, and the second syllable simply *im*. This is not a correct way of pronouncing a word, but nevertheless it sometimes saved me some difficulty. Of course, in doing this the division of the syllables must not be too marked. In most cases, however, the changes were scarcely noticeable.

If in a sentence there occurred two words which I could not readily pronounce, it often happened that in trying to speak one properly I forgot the other and consequently had no trouble in pronouncing it.

One way in which some avoid stammering is by the use of synonyms. In the English language there are synonyms for almost every word, and some stammerers are adepts in discovering and using these synonyms. But this method, of course, does not tend to strengthen the will or mind as much as if it were not practiced. The stammerer, in order to overcome his defect, must have a strong will and in this respect the use of synonyms will be more of a hindrance than a help.

In translating foreign languages into English I found that I had almost no trouble in giving the translation. I attribute this to the fact that one of the principal things in translating is to get good sense, and in my desire to obtain this, I forgot to a degree that I had any difficulty in speaking.

I could also read Latin without hesitation or sign of stammering. I am of the opinion that this is because in reading Latin one has to be very careful in regard to the



Then again, in reading aloud, especially if the passage is difficult, one has to be careful to get the thought and quantity and accent of words, and in trying to get the proper pronunciation he is oblivious to everything else. read it as the author expected it to be read. In doing this one becomes so absorbed that he has no time to think of certain words as being difficult to pronounce, at least not until they are spoken, when he is surprised that he could have read them so well.

Thus one of my theories concerning stammering is that if the mind of the stammerer is taken away from himself, from his defect, and kept away, his attention being drawn to some more congenial subject, he will, under these conditions, be able to speak without any hesitation.

Another belief also is that the stammerer lacks confidence in himself, or in his ability. He has not faith in his own power. I think one proof of this is shown in the fact that when obliged to read a certain sentence if he is conscious of the eyes and ears of others, he stumbles over the words, rendering the sentence but poorly. But on the other hand, if the same sentence is to be read by a number of people at the same time, the stammerer can read it in concert perfectly as well as any one.

When I used to stammer I experienced more difficulty when engaged in conversation than when reading. I believe, however, that if I could have imagined myself whenever I uttered a word to have been speaking together with others, the result would have been different.

Stammering, as a rule, does not bar a person from singing. I have never seen or heard of any one whose ability to sing was hindered by stammering. Singing is one accomplishment in which the average stammerer, as well as any one else, can take pleasure, and we who have stammered have reason to be thankful for this.

One thing which usually falls to the lot of the stammerer is social ostracism. In society it is generally the rule that the brilliant and entertaining speakers are the ones who are most sought for. Of course, among these

the stammerer is not included. He may possess unusual intelligence, wit, or humor, but as he cannot express his thought, society votes him dull and uninteresting. The stammerer himself realizes this more than any one else. He takes no pleasure in being where he cannot enjoy himself, and accordingly drops out of the social world from which he is not missed, and his place is soon filled by some one more congenial.

The stammerer may be compared in some respects to a slave. Stammering holds the mastery over him and he can rarely, if ever, unaided, break away and gain his freedom. Slaves are not allowed equal rights with others, and are looked down upon. Just so the stammerer is shunned by his more fortunate brothers; in reality he does not enjoy equal rights with all men.

### MAKING THE BEST OF OPPORTUNITIES

The model institution for stammerers may be likened to a kindergarten where we learn the first principles of talking; separating words into their component parts, going back to the very formation of speech. Learning to creep before we walk; and we should learn to creep well. Platform practice, one of the important features of the school, is something with which every pupil should become familiar. One cannot get too much of this excellent drill, the purpose of which is giving the pupil the practice of thinking on his feet, and acquiring an ease of manner before the public, the mastery of which cannot fail to impart a greater feeling of confidence, and which is half the battle. Be sure you have mastered everything as near as lies in your power to do so, then go out and fight valiantly, using the modified method and carefully observing the rules of relaxation, both mentally and physically.

Be master of the situation. Look the person to whom you are talking squarely in the face. He will have more confidence in what you say. Cultivate a feeling of

equality; be brave and manly, fear nobody but God. Hold your head erect and look up. Always speak from a closed to an open position. This will oblige you to breathe through your nose, which is the proper manner of breathing, which purifies the air and induces a feeling of calmness. Be deliberate and talk slowly; you will speed up fast enough, later. Do not for a single moment relax your vigilance. Give every word its full rounded tone and correct articulation. Cultivate a smooth, even gliding manner of talking, blending one word into the other. Always have a good supply of air in the lungs and carefully avoid talking on exhausted breath. There is plenty of air all about you and it costs you nothing. No matter how fast the other fellow talks, just keep your poise and will-power. Cultivate at all times and under all circumstances a feeling of repose. As far as possible, avoid losing your temper. Be particular in following all instructions until the new and correct manner of talking shall have become permanently established. We have a habit of years to overcome. Our very natures almost must, by dogged and persistent cultivation, be changed. Do not become discouraged if in an unguarded moment you fall, but go at the word or difficulty in an intelligent manner and see why you failed. Analyze your own peculiar difficulty. A smooth sea has never yet made a skillful sailor. Practice faithfully at all exercises and persevere, for, after all, is it not worth the price? Cultivate pure thoughts, retire promptly at ten o'clock. Remember your nerves are delicately poised and cannot be abused without your paying the penalty. Therefore, do nothing to unduly excite or injure them. Take daily some good form of physical exercise that will bring into play all of the muscles, thereby resting and quieting the nerves.

The author finds that nothing so successfully accomplishes this end as good, healthy exercise, to bring, as nearly as possible, every set of muscles into play. Do not exercise just after a full meal. Avoid late sup-

pers, as the stomach cannot be abused without effecting the nerves, and, more important to some degree, the talking. In talking to your friends or relatives be just as careful as possible. You cannot afford to take any chance of losing confidence, which, if once lost, is with great difficulty regained. Mingle with people, get out more, and be one of the community in which you live. Let people see that you are somebody; assert yourself, cultivate more positiveness of manner, have a mind of your own. Do not be swayed by every wind that blows, nor every tide that flows. Do not take for granted everything told you. Come out of your old shell and be a man among men. Above all, be a manly man. Stammerers are by no means such fools as some people may give them credit for, and they should speedily be taught the fallacy of such an erroneous belief. We should learn that one great factor in our complete cure is the exercise of will-power. The first thing each morning: make it your determined resolve that this day shall be a better day for your talking than the day preceding. Then bend every energy to make it so. You will need this exercise of will-power many times. You will need it every day. Just along this line we might, perhaps, appropriately quote a few lines from a well known writer: "There is no chance, no destiny; no fate can circumvent, or hinder, or control, the firm resolve of a determined soul. Gifts count for little; will alone is great. All things give way before it, soon or late. What obstacles can stay the mighty force of the sea-seeking river in its course, or cause the ascending orb of day to wait? Each well-born soul must win what it deserves. Let the fool prate of luck! The fortunate is he whose earnest purpose never swerves, whose slightest action or inaction serves the one great aim. Why, even Death stands still and waits an hour, sometimes, for such a will."

Master of human destinies am I!

Fame, love and fortune on my footsteps wait.

Cities and fields I walk; I penetrate



Deserts and seas remote and passing by  
Hovel and mart and palace, soon or late  
I knock unbidden at every gate!  
If sleeping, wake,—if feasting, rise before  
I turn away. It is the hour of fate,  
And they who follow me reach every state:  
Mortal's desire, and conquer every foe  
Save death; but those who doubt or hesitate,  
Condemned to failure, penury and woe,  
Seek me in vain and uselessly implore;  
I answer not, and I return no more.

—*John J. Ingalls.*

## HOW TO CURE STAMMERING

Stammerer! As I write it, the mere sight of the word has a distinctly depressing effect upon me. Can it be that we are outcasts from His love? No! my brother sufferer. God in His goodness has furnished us with all the organs necessary to speech, but by some strange chance we have failed either to sufficiently develop or to properly utilize them. Have we a mind, a brain, lungs, nerves, muscles, a tongue, lips, teeth, vocal cords, glottis, larynx and trachea? There is no doubt about it! We know that we have! If this be true, then the fault can only lie with us, and certain it is that it is possible for us to correct the defect if we can but learn wherein we err, cultivate that which needs cultivation, and ascertain how to properly apply it to the organs we already have.

And what is stammering? What need is there for a scientific definition? All of us know what it is—know it only too well! Simply it is the inability to speak at will. Nor need we differentiate among the different forms of the defect. The effect is the same—we can't talk as others do. Is not that sufficient? Why, either should we discuss the anatomical construction of the organs of

speech, or their physical action? All intelligent people are presumed to be informed along these lines. But what we do wish to get at, is the personal treatment necessary to effect a cure. And to this feature I particularly address myself. Cheer up, friends! for whether a habit or disease, I answer—habits may be broken, and disease may be cured.

If we can talk, but cannot do so at will, then there must be something radically wrong in the exercisement of our will. The will, however, is simply a creature of the mind. The mind, in turn, is but a mental function. Now, a function necessarily presupposes an organ. All science demonstrates that this organ (of the mind) is the brain. Also, that this same brain is the organ of the body; else, why this network of nerves, motor and sensory, extending from the brain to every organ, muscle and bone in the body? If you admit this—and it does not permit of denial—then we have successfully arrived at my first proposition, i. e., that the brain being the organ of every mental and bodily function, and speech being produceable only by a certain and correct utilization of both functions; therefore, the first source of stammering lies in the brain.

My next proposition is that stammering is due to a want of development in that convolution of the brain which governs "time." It is a scientific fact that the brain does not as a totality execute the mental functions as one great whole. But that as one part of the body sees, another breathes, a third executes motion, etc., so one part of the brain must, of necessity, execute one class of mental operations, and another part another class. Anatomists concede that different portions of the brain manifest different functions. Indeed, it is said that the brain is composed of as many distinct organs as the mind is of faculties. It is, therefore, no stretch of the imagination to conclude that some particular portion or convolution of the brain does not govern "time." Who can fail to perceive that a lack of proper periodicity, punctuality, etc., in utterance is the chief difficulty experienced

by stammerers. Really, it is herein that we stammer. We cannot speak at the time we desire to, because the tongue refuses to leave the roots of the upper teeth on time; because it repeats the same movement more times than is necessary for the utterance of the letter, syllable, or word we would speak; because the lips refuse to open or close on time, etc. The same is true of the contraction and dilatation of the glottis.

It is all a question of time. We even think and breathe completely out of time. Therefore, I say, we should certainly, and first of all in seeking a cure, pay especial attention to the cultivation and development of that organ of the brain which directs and controls "time."

Where is this organ situated? I don't know! Nor is there any necessity that we should find out. For we do know that to develop any faculty of the mind it is but necessary to exercise that faculty. If we wish to improve our memory, we memorize, etc., etc. And if this is possible to the mind, it is, for reasons already stated, possible to the brain. If, then, we would develop that part of the brain which regulates "time," we have but to practice time. Practice time, periodicity in breathing, in speaking, in reading, in sleeping, in bathing, in eating, in all our actions—and it must, I think, so develop the proper convolution of the brain that we shall find not only relief from our affliction, but also that improvement in health, in strength of character, and in self-control which must result from regularity in habit. Periodicity is an infinitely important thing in this world of ours, and it behooves us to observe nature. How necessary that the sun, moon, and stars rise and set on time; that the seasons roll around on time; that harvests mature, trains be dispatched and run, and business be commenced on time. Even life itself is composed of one continuous chain of successive events! Its absence in nature and in man means confusion and ruin. Let the stammerer, therefore, practice time, time, until periodicity shall become a confirmed habit.

My third proposition is that the building up and improvement of *HEALTH* plays a large part in effecting a cure. I venture to assert that no stammerer enjoys thoroughly good health, and this without fear of contradiction. Why? Because health consists in the normal and vigorous action of all physical functions and organs. And this no stammerer possesses. Is it attainable? Certainly! Because health is spontaneous. It is our normal state. To repossess ourselves of it, it is but necessary only not to abuse it! Just here I fancy I hear some good friend exclaim, "Bosh! I don't enjoy particularly good health it is true, but I do not abuse it." Don't you? Let us see. Do you smoke, chew, use liquor, coffee, or tea; eat, sleep, bathe, or exercise irregularly; fret or worry? If so, then you do abuse your entire nervous system, and, consequently, your health. Stop these abuses and build up your nerves, your health, your speech, your happiness. We shall breathe, think, feel, speak, everything exactly right whenever the proper conditions are fulfilled.

That liquor, narcotics, and want of proper exercise are injurious to the nervous system is too patent to admit of argument. But I wish to say something as to the necessity for a plenty of sleep, air, water, and cheerfulness; because of these things people take but little thought. Yet the lack of any one of them in proper quantity not only impairs what health we still have, but also greatly impedes the cure of stammering.

#### AIR.

All that lives breathes, and must keep on breathing till death. Without oxygen there cannot be life; and by breathing it is, that we get it. The first post-natal function of a new-born babe is to take a good long breath, which sends the blood bounding off through its system with a rush, and starts every other function into instantaneous action. Breath is the great "re-invigorator" of life and all its functions. Would you get warm and keep warm



when cold; breathe copiously, for this increases the carbonic consumption all through your system, which creates animal warmth. Would you cool off and keep cool in hot weather; long, deep, copious breathing will burst open those millions of pores, each of which by converting the water in the system into perspiration, casts out heat—and, how very important, unloads disease at every pore on the surface of the body; thus restoring health, strength and life. If anything, we should attend more to breathing than to eating. We cannot be intemperate in the use of air, for breathing oxygenizes and decarbonizes the blood. The more we breathe and the deeper we breathe in this oxygen, the less nervous, the less susceptible to disease we become, and the more vigorous, hopeful and happy we are.

Therefore, we should indulge daily and frequently in lung exercise and in any other exercise which demands lung action. The air, too, you must know, furnishes a natural bath, cleansing and purifying with its contact everything corrosive and destructive. If this be true, and we know that it is, why do we not daily, for a time, expose the whole body to its renovating processes? I have myself done this and can vouch for its efficacy.

#### WATER

No one can live without water. Undoubtedly, it is man's natural beverage. Beside promoting health, its medicinal properties are also great. No medicine, no diet, nothing equals its application, internal or external.

#### EXTERNAL USE

The body must be guarded at all points, its organs must be permitted to act as nature intended; its functions must not be interrupted. The waste and poisonous ingredients generated by this life process must be allowed to escape. The skin affects all these by means of

its pores, some 3,000 being contained in every square inch of surface. Forget not that your skin furnishes the readiest mode of reaching and relieving your nerves. Perspiration, sensible and insensible, is perpetually escaping from all parts of the skin. Thus is the waste matter carried off as fast as it is manufactured. Let me repeat, this waste matter is poisonous. It must escape, or we slowly extinguish life, and hence the imperative importance of keeping the pores open and free. This can only be accomplished by frequent bathing.

Water, therefore, should be freely applied to all parts of the body daily, if only by means of the sponge bath. Not only does this promote tone in body and mind, but by the process of absorption much of the oxygen in the water is thus taken into the system and supplies us with an additional quantity. Marvelous, when we come to think of it, this body of ours!

#### INTERNAL USE

We drink too little of water. Recently, in a German scientific journal, I read an article to the effect that for every ten pounds of weight a person should drink at least one glass of water daily. I do not question its correctness, for we know water to be one of the most powerful neutralizers of the corrupt matter in the stomach. Only a fluid could transport all these life materials and excretions from and to all parts. Excretions are continually passing off by perspiration, expiration, etc. It must be re-supplied or it will become exhausted. How is this re-supply to be furnished? Naturally and best by water. It is as essential to life as anything but air, and to some degree nature enforces its use, for all articles of food contain water, an irrefutable argument for its necessity. And let me once again impress it upon you that oxygen means life—water contains 88.9 parts of oxygen as to weight, and as to volume one-third.

## SLEEP

All that lives, sleeps. It is life's *sine qua non*. It is a luxury, admitted free of duty, to be had for the asking. Yet how few of us appreciate it. Until it masters us, with what magnificent carelessness do we treat it. How many of us are willing to forego, say, a pleasure even. What do most of us care for the arrival of bedtime? It is treated as a matter of no consequence. Yet considering it only in respect to our bodies, the change produced by sleep is very considerable and most important. It is nature's repair shop; it is rest. Those whose hearts are oppressed, whom doubts and anxiety assail, whom maladies afflict, alone can estimate the value of sleep or know the sweets of its influence. No cure for nervousness at all equals it. Dismiss cares and troubles and quiet down. Let the world jog on, and things take their course, while you—you stop a bit and *REST*.

## CHEERFULNESS

Cheerfulness means content; content, happiness; and happiness means quiet nerves and rest. Stop worrying. Every bad feeling, every unpleasant thought increases your malady, yet does no good. Make the best of what is, and seek amusement. Enjoy whatever you can enjoy, especially music; for this is an excellent tonic for the nerves, as well as a restorer of mental and physical balance—a pleasure producer. And pleasure is medicine. Think good thoughts. Observe and enjoy the glorious beauties of Nature, for these are “extras,” as it were, thrown in upon us by the Almighty. Keep up a happy spirit, for your trouble is relievable. In a way you are not so unfortunate, for it you look about you at the cripple, the blind, the dying, surely there is room in plenty for gratitude.

## FACTS AND THEORIES

As we pass from an old century into the realms of a new we are apt to reflect on the many advancements in science, civilization and moral philosophy; but with all the advanced learning of modern times, with all the precaution of our most eminent historians and philosophers, one of the saddest chapters of human history is still to be told. A tribe of sufferers handed down from generation to generation, laughed at by the many, shunned and pushed aside at every turn, they were left to sink deeper and deeper into the slough of despondency. For ages, stammering people as a class have been sorely neglected. We find the fangs of stammering imbedded in one of the greatest men ancient Greece ever produced.

Demosthenes, whose life is full of interest and instruction, defrauded by his guardians and turned out in poverty on the world, weak in body and subject to great dejection, began his struggle for pre-eminence. Plutarch tells us that the first address by Demosthenes before the General Assembly was a complete failure owing to a stammering tongue; and we next find him shutting himself up in a cave with an invincible determination to free himself from the bonds of faulty utterance; and in the course of a few years we find him one of the most brilliant and polished orators of the Grecian era. Demosthenes turned his attention to talking and reading aloud, and he himself proclaims in one of his orations that his physical and vocal deficiencies were overcome by practice. He would practice the pronunciation of certain letters of the alphabet; he would learn and recite verses, all of which, no doubt, had a tendency to correct the faulty muscles which govern the vocal organs, and by so doing he was perhaps unconsciously eradicating his vocal defects. But Hippocrates, an eminent physician and foresighted philosopher, attributed the cure of Demosthenes to the practice of



reading, pronunciation and respiration. In a measure he used precisely the same resources to affect his cure as are used in our stammering schools to-day. How came it to pass, then, that these enlightened views ever fell into oblivion?

The question is really only a part of the larger one, how it came to pass that the high æsthetic culture and brilliant intellectual development of the Grecian era, which might have seemed possessions of mankind forever, were lost in the darkness and barbarism of the middle ages, and when at last a revival of learning took place, things were but little better. Early so-called "professors" did absolutely nothing for stammering people; and to what little they professed to have accomplished we owe intense sufferings rather than thanks. The stammering people were left in the hands of coarse and ignorant charlatans, who aimed at everything else but to apply the correct resources to effect a cure. It is to this kind of ignorance that we owe much suffering and pain. It is mainly to this pompous set of egotists that we owe the defective earlier theories which have for so long usurped the position of the common sense principles adapted by intelligent vocalists.

No one nowadays who is engaged in the treatment of stammering, doubts that he has to deal with a disordered function. Whatever opinion may be held concerning its essential nature, it is admitted on all sides that its manifestations take place through the nervous systems and are affected by the conditions of the nervous parts which minister to them. But the nerves were falsely and erroneously considered to be the primitive and sole cause of stammering; and some of the best intellectual representatives of the medical profession frankly admit that the same cloud of ignorance which has existed for generations upon the subject, still hovers over it.

It is a shameful condition for people who have been suffering from remotest of times, and the question naturally arises: who is responsible for such intense and pro-

longed suffering? It has been, perhaps, because we have had no brilliant, intellectual, smooth-spoken orator to put before the public the predicament of the stammerer. Simply because he was held in bondage by the "fangs" of that venomous serpent "stammering." Not until recently have men begun to regard stammering as a defect, caused in a measure to a certain lack of knowledge upon the part of the stammerer, of the correct manner of positioning the organs of articulation in their relation one toward the other. Granted that the organs of speech are positioned properly, stammering is next to impossible.

The old metaphysical ideas entertaining that stammering was a disease have been exploded and in their place have been put substantial and brilliant methods, the firmness of which has been admirably proven and substantiated by eminent vocalists; and it is to them that we owe our thanks and it is by them and by their efforts that stammering people have been emancipated.

Looking back at the strange and erroneous notions which were formally entertained as infallible for the cure of stammering, and considering what little observation was made of its manifold varieties, we cannot wonder that its jurisprudence was in a very defective state. It is evident that the farther medicine and the surgical case advanced on the path of inquiry, that the stammerer's woes and suffering were increased instead of diminished.

The mind may be defined physiologically as the sum total of the three functions of the brain, which are known as thought, feeling and will; and from this, moral philosophy makes hard, fast lines, and lays down abstract propositions concerning the power of the will to govern the vocal functions; but when the utmost power of the will is summoned to your command, and when the mind and body are subject to the utmost tension, in the hope of overcoming the defect, and when at last articulation is attempted, we find the same faulty conditions of the muscles, which throws the stammerer into a sort of deep melancholy, a close and dangerous ally of stammering,

which should and must be carefully guarded against, in the hope of obtaining a cure.

Let us not deceive ourselves, then, with vain imaginations that stammering is due to any one cause; that the nerves or will-power is the sole and primitive cause of the defect, nor that the cure of stammering lies within some powerful nerve stimulant, or the intellectual development of the will. True it is that both the nerves and will-power are important factors to be considered in the cure of stammering, but taken separately and treated apart as two distinct functions, and falsely considering that the one has no bearing upon the other, you will find such resources fruitless; they have a tendency to decrease the hopes of the stammerer. The cure of stammering is the result of long and diligent practice of the methods which have been given us, and can only be obtained by diligent persistence of logical reasoning and a thorough understanding of your own defect; a knowledge of the vocal functions and the duties which they are intended to perform.

The larynx is the special organ of voice; it lies just below the root of the tongue, in front of the pharynx and under the skin. It is composed chiefly of cartilages, with a mucous membrane and ligaments; the upper chamber of the larynx is called the glottis, and it is the contraction of the glottis which, perhaps, has evidenced the manifestation of stammering. At the top of the glottis is a small lid known as the epiglottis, which is vertical during respiration, but closed backward over the glottis when swallowing; the posterior arytenoid muscle has control of the epiglottis, and it is owing to the spasmodic action of this muscle that the breath is emitted from the lungs in irregular jerks, which in time develop into stammering. But the spasmodic action of the epiglottis must not be considered the sole manifestation of stammering. In fact, we have, only traced the first step of our mighty foe, for we have only considered the voice; speech articulation as well as voice is necessary; and in this the tongue, palate, lips and teeth are employed. To produce clear

articulation the employed functions must be trained to act in unison and simultaneously; the air expelled from the lungs must have free and unobstructed passage through the trachea in order to supply the other functions with breath during articulation.

The stammerer in his forced efforts to articulate, stops the continuous flow of breath either entirely or partly; the breath must necessarily escape in some way and is forced up the passage against the will of the stammerer and escapes between the teeth, causing that ever familiar sound, the "hiss." The outgoing breath being exhausted, the stammerer attempts to articulate during inhalation, but finding it impossible he gives up, completely exhausted. For each and every attempt of this kind his mental emotion is increased, and the constant dread of stammering is always before him. Such a condition of affairs is exceedingly dangerous, as in time it cannot but help to impair the mental and physical faculties of the sufferer and often results in a case of the "dreaded melancholia."

The stammerer may greatly relieve himself by paying strict attention to respiration, by full contraction and expansion of the lungs at each breath.

By this method he will greatly improve the action of the breathing apparatus and by so doing he will take an important step toward the eradication of his defect. Loss of sleep, dissipation and fear are all dangerous allies, as they in time impair the general health of the sufferer.

It is by no means an easy task to completely cure a severe case of stammering, no matter how complete the method may be. Your habit of stammering was not acquired in a week or in a month; stammering does not spring upon a victim as the leopard does upon his prey, but the embryo has been germinating within you for months; yes, even years; and from this we infer that you cannot be cured of your defect in a day, or a week, for the muscles must be trained to uniform obedience of the will and the will must be trained to a steady and intellectual control of the muscles. This may require a month or two.



It is upon this principle that the best stammering schools in the country are founded, and it is through this method that thousands of sufferers have been emancipated from the bondage of faulty utterance. Although an emancipation has been issued to stammering people, the infallibility of which nobody doubts, yet it is by no means complete, for there still remain thousands of sufferers, who, on account of various circumstances, are unable to avail themselves of a course at a stammering school.

If you cannot attend a school, it is your duty to seek and find the cause of your defect. Always struggle onward with the confident hope that the day will dawn, although it is yet only the twelfth hour of night.

In the hope of obtaining a cure, you should guard carefully all effects which have a tendency to weaken the mental or physical faculties; avoid extreme excitement and agitation, as it only weakens the nervous system, which in time will prove a serious opponent to hope of obtaining a cure.

For the manifold varieties of stammering thousands of theories have been imposed upon the public as infallible for its cure, but in conclusion let me say, regardless of whatever opinion may be held by others; there is only one way of eradicating it and that is by vocal gymnastics.

Many parents make the mistake of teaching their children to talk at too tender an age. This manner of "cramming" children and burdening their little minds with an extensive vocabulary oftentimes excites within the brain of the child a dormant or hidden predisposition toward stammering. This is shown in the fact that the large majority of children who subsequently turn out to be stammerers, speak plainly enough when they first commence to talk. It is only after they have discovered in their utterance an irregularity that the difficulty begins to manifest itself to any marked degree. This irregularity is often brought on by overtaxing the child-mind, the reaction of which is often dangerous. Let the child acquire

its vocabulary by imitation, observation and listening. Especially should this plan be followed out, in children where predisposition toward stammering is suspected.

## THE ERADICATION OF STAMMERING

There is no sickness, disease or defect of any kind that has received so little attention as stuttering and stammering. In fact, until recent years it has received practically no attention. The cause of this may be attributed mainly to the fact that in reality it is not a disease and cannot be classed as such, consequently this long standing neglect. Physiological science has, until recent years, attributed the main cause of these impediments to carelessness on the part of the afflicted, which was unreasonable to the uttermost, although we must admit that the defect is often contracted through carelessness. But let the impediment grasp its hold, let the patient become a confirmed stammerer, and he will stammer no more from carelessness. No one afflicted with such an impediment would hesitate in speaking if he knew how to avert stammering.

Impediments of speech vary in form and nature and may be divided into many classes, such as drawling, lisping, mumbling, burring, stammering and stuttering. The first four mentioned are minor defects. There are other defects which are caused by the organs of speech being malformed, such as cleft-palate or hare-lip. These cases (cleft palate and hare-lip) yield only to surgical treatment. As this article is mainly for the interest of stammerers and stutterers, we will confine our writing to these two defects. Some writers regard stammering and stuttering as one and the same thing, while there are others who strongly insist upon the necessity of distinguishing one from the other as implying two different forms.

The definitions generally given are these: Stammering, a defect in the utterance of consonants; stuttering, repetition of words or syllables. Although they somewhat differ we will often find them existing in the same person. This is termed stammering and stuttering combined. These defects are in most cases acquired by the sufferer in the early stages of life, namely, childhood; nevertheless they may be contracted at any later period of life. They originate from many causes. Stammering may be the result of a severe sickness; it may be the result of sudden fright, and lastly it may result from a cause from which so many cases originate, namely, mimicry or imitation.

Sad indeed is the case where the impediment is acquired through imitation, and severe is the punishment. Some writers claim that a disposition favorable to the development of the impediment may be inherited. If the parents are stammerers, it comes very natural for the child to also stammer. A child will ever imitate its parents; if the parents speak correctly, the child will learn to speak correctly; whereas, if they stammer, the child will stammer. It is hardly correct to attribute stammering to heredity. It would be more correct to attribute it to mimicry, but a child is not to be censured for contracting the impediment, for it does so in ignorance.

If parents, governesses, teachers and tutors possessed more knowledge upon the subject, we would find the number of sufferers greatly decreased; but they being incompetent to direct the articulation of children, a simple case of stuttering soon finds its way to that stage of the defect known as stammering. A stern parent need not expect to break the habit through blows of the punishing rod. Fear of the punishment is alone enough to bring forth a convulsive fit of stuttering.

All sufferers of these defects have most likely at some time or other made the attempt to cure themselves, but with the general result, failure. Why? Because they

lacked one thing which is ever essential in a cure of the defect. They lacked self-confidence. They did not believe at the very beginning that the vocal and physical exercises they were taking would prove of any benefit. Why did they not believe that the treatment they were taking would cure the defect? Because there was nothing to encourage them. A stammerer will put in two or three hours hard work at exercise and then voluntarily or through necessity attend to other business, and before he is aware of it he is stammering as before. Many stammerers believe that they, being unable to cure themselves, will find no better result at an institution. This is wrong. At an institution you have everything to encourage you. Pupils who were stammerers before attending the institution are, when cured, sent home with joyful hearts. Another thing is this, they who are undergoing treatment at the institution are not allowed to stammer as they had allowed themselves to do while trying to effect self-cure. Constant care is exercised over them. Therefore, we must maintain that the safest and quickest way to get cured is to attend an institution. No stammerer need fear that his case is incurable. If you attend a reliable school for the cure of stammering, you will soon be cured. But to those who are not yet ready to enter an institution we will try to give a few hints, sincerely hoping that they may prove of benefit to some poor sufferer.

First of all, you should try to give your mind a clear conception of the different organs used in the production of speech. In order to abolish an evil you must first of all know wherein it exists. It is not my intention to venture at a minute description of the anatomy of voice, but I will not withhold a few remarks regarding phonation. The foundation of speech is voice, or sound. Sound is brought forth by a current of air passing up from the lungs through the trachea (sometimes called the windpipe). This current of air striking the vocal cords, which are situated immediately below the aperture of the trachea,



generates sound. It now remains for the organs of the mouth to modify the sound thus generated into articulative speech. The organs of articulation are the lips, tongue, teeth, oral cavity, nasal cavity, etc.

A distensible cavity called the pharynx is situated at the back part of the mouth, below it is the glottis, above it are the nostrils. When the pharyngeal opening is covered by the soft palate, the expiring breath finds its way into the mouth; the latter being closed it will distend the pharynx. When uttering the sharp letters, such as *k*, *p*, *j*, *b*, etc., they should be pronounced with the breath contained in the pharynx, and no further emission should be allowed from the glottis. In a case of stammering we find here a faulty action, instead of uttering them as above stated, the stammerer will allow the chest to fall, that is he will allow the glottis to emit the breath and by this means try to articulate the letters. This is decidedly wrong; it is wasting breath. They should be uttered by the breath contained in the pharynx, and no further emission from the glottis should be allowed. This is one point a stammerer should remember, speak without wasting the breath. Let us observe one more point regarding phonation, and that is the pitch of voice. It is due to the variation in length of the vocal cords. Thus we find when the vocal cords are stretched to their utmost tension the highest pitch of voice is attained. We may notice while singing in a high pitch, the voice tires more easily than if a low pitch were maintained. The stammerer invariably speaks in a high pitch, which leads to exhaustion. Try to maintain a lower pitch.

Knowing that stammering and stuttering differ one from the other, we will try to discuss them separately. Stuttering may be termed a proclivity. To eradicate stuttering, vocal exercises are most necessary. A stutterer does not possess the harmonious coöperation of the different organs of speech necessary to make it fluent. The stutterer finds difficulty in subjoining the vowels to the con-

sonants. For instance, when trying to say the word "pa," he will utter the consonant *p* three or four times before subjoining the vowel *a*. Practice the letters separately before forming them into words, and learn to speak low and distinctly. A stutterer generally says what he wants to say, but it takes him some time to do it, he simply stutters or repeats rapidly.

Let us now look at stammering and again see where it differs from stuttering. Stammering is not a proclivity, but we may term it an imaginary disease. We meet in daily life people who suffer from no sickness or disease of any kind, but still they are ever complaining. These people are called "*maladies imaginaries*." Can we not compare the stammerer with these people to some extent? They are known to take so much care of their constitutions, and give the body so little exercise that in time the body becomes rigid and unwilling to act. The class of people above mentioned, namely, "*maladies imaginaries*," are known to confine themselves to their bed for imaginary sickness. This only tends to weaken the body. Let them get up, and after giving the body the necessary exercise, a better feeling will soon overcome the illness, which by this time will have left them. But what has this to do with stammering? We shall see. A stammerer secludes himself from the outer world, does not mingle with strangers, abstains from talking as much as possible. Where the "*malady imaginary*" refrains from bodily exercise, the stammerer refrains from vocal exercise. The stammerer must emerge from his seclusion, meet with strangers, face them bravely, know that there is no one to fear but God, and before the lapse of many months a considerable amount of fear which is ever harrowing, will have left him.

Each case of stammering seems to manifest some individual peculiarity, in other words, no two cases of stammering or stuttering are just alike, consequently, a general set of rules governing the cure of all cases cannot be laid down. Suggestions may be given, and the pupil, after

studiously looking into his case, can work out a course of procedure most suited to him. The seat of difficulty in a case of stammering lies mainly in a faulty action of the respiratory organs. We find in a case of stammering that the diaphragm, situated in the cavity of the chest, is depressed by the contraction of the latter. The chest is turned inward instead of outward, the shoulders, instead of being thrown back, are languidly hanging forward. Here are two things which must be avoided. The irregularity in breathing and the depression of the diaphragm. Let us look forward to a remedy. First of all set aside certain hours of the day for breathing exercises—in taking which it would be practicable to count from one to a certain number, say from one to six—do this while inhaling and the same while exhaling. Repeat the exercise every day for about two weeks. In addition to this add exercises in calisthenics, for instance, the swinging of Indian clubs, or dumb bells. A long walk in the fresh morning air is splendid exercise for the building up of the diaphragm. It may be necessary to state that these exercises ought to be taken up gradually. To go at them with too much vigor in the very beginning, only tends to tire the body. Do not try to extirpate an evil in three or four days that has taken root many years ago and proved a hindrance to the development of every success to be accomplished in life.

The development of the chest is a main point to be regarded while undertaking a cure. Let us observe a clergyman or other public speaker, and we will generally observe that there is a conspicuous development of the chest. Let the stammerer try to follow the example of the public speaker and develop the chest, as this alone helps the abnormal action of the diaphragm. In addition to the exercises above suggested, the pupil must add vocal exercises, practice the letters alone before forming them into words; by and by venture to give readings and recitations to a number of friends. In course of time the voice will become firm and strong

and the impediment will soon leave you. To cure an ordinary case of stuttering is not difficult, but if the impediment be not checked in time, the patient will soon find his case has taken a decided turn for the worse, that is, stammering and stuttering combined, and finally he becomes a confirmed stammerer.

Excitement has a great deal to do with stammering. When a person is excited the respiratory organs work fast and irregular; this has effect on the mechanism of the glottis, consequently when trying to speak, a hesitation is the result. In a person not addicted to stammering the respiratory organs regain their normal condition more rapidly than in one thus addicted. A stammerer tries to open the glottis by force. In this he seldom succeeds. When he does, he may utter one or two words, then finding himself on the verge of exhaustion he must stop and fill his lungs, which are now completely empty; in this interval, while renewing his strength, he also renews his fear; the excitement under which he labors instead of leaving him only increases. When making a second attempt, he finds it a complete failure. Finally, recognizing his inability to control any of the organs producing speech, he gives up in despair. A stammerer should not allow himself to get excited, and should by no means try to speak while laboring under excitement.

There is still another point to be looked at. Before undertaking to cure a case of stuttering or stammering, the sufferer ought to refrain from all such tendencies as serve to excite the nerves. Do not use tobacco; avoid alcoholic liquors by all means. The habitual drinking of coffee is also to be avoided. After the foundation of a cure is laid down, its perfection and the time occupied therein depends fully on the aptitude and self-control of the afflicted. Just how long it will take to effect a cure, cannot be determined. But, let it take a few weeks, yes, even months, I am sure after the object is accomplished the stammerer will say it was well worth it. The safest and quickest way to cure the malady is to attend a good



institution. To those to whom this is impossible, I would say, *cure yourself* and remember that perseverance eventually leads to success.

## VOLITIVE REGION IN STAMMERERS

As this is a subject that every stammerer is deeply interested in, I will endeavor to the best of my ability, from a careful and thorough life-study of the subject, to give stammerers something beneficial and of interest.

I deem it needless to define stammering or stuttering at any great length. I think there is not a person in existence, afflicted by this speech impediment, who does not understand what is meant by these terms, and those who are not thus afflicted, but who have surveyed the stammerer under the distressing labor of attempting to convey his thoughts to his companions, can readily realize its power upon its subjects.

Stammering is a mental and physical defect; the ratio to one another stands five mental and one physical; thus in attempting to cure the defect, this should be one of the important things to keep in mind.

The question may be asked: Where do you get this ratio? I consider this a very important question to answer, and do not wonder why so many stammerers would ask it.

We must view the stammerer in all his peculiar traits, but do not understand me to say, this is a strict, and unvariable ratio in each case; the disposition, temperament and surroundings have much to do in establishing it, and it may vary slightly above or below this estimation.

1st. As a proof of mental or psychical defect, we are aware that the stammerer can read or speak with perfect

fluency when alone. (Reason.) No embarrassment existing in case of failure.

2nd. He can speak or give command to animals. (Reason.) Same as No. 1.

3rd. He can often read selections or deliver declamations before audiences. (Reason.) Measured time as in music. He knows what he is going to say.

We are well aware that many stammerers fail to speak because they themselves do not know what they want to say. In this case; (first,) know what you want to say; (second,) say it.

4th. We find that he is capable of rendering reading selections with less fear and nervous strain the first time he attempts to render them than at any following time, for he then has no knowledge of words in the selection that are in his non-speakable vocabulary.

5th. Speaking to near and dear friends who are in sympathy with him, and whose very life is a part of himself, puts the stammerer so much at ease, and so soothes his nervous system, that it enables him to speak much better; while on the contrary, if he is confronted by a stern, strong and firm-willed person, it is with great difficulty that he can speak at all.

As a physical defect, we find the most difficulty in breathing.

To overcome the physical defect, perfect your breathing; by this I mean, get complete control of the respiratory system, which can be accomplished by following any recognized system of breathing exercises.

I shall first endeavor to treat the physical side of the defect, and shall endeavor to substantiate in terms that are convincing within themselves that the means of cure is practicable. In order to speak with ease and fluency we should have a free and controllable current of air flowing past the vocal cords. How often have we seen the stammerer standing (as a statute) with all the expressions of pain and agony upon his face, unable to make a sound, or to force a particle of air past the vocal cords. Where,

then, is the difficulty? Is it in the lungs, bronchial tubes, trachea or larynx?

The principal defect, viewing the physical side of the question, is in the abnormal action of the diaphragm. Here is the foundation from which we should begin to build for our success in the physical work. Practice and labor diligently, until you have obtained a complete control over the diaphragmatic muscles.

Cultivate deep, full breathing, take in quick, even gasps, expel same, retain full breath as long as possible, expel slowly and gradually. Work in all the combined acts of breathing you can think of, but be sure it is by use of the diaphragm; also use the vowel sounds in connection, to cultivate tone production. Gymnasium exercise is also very essential; it invigorates and enlivens, better fitting the person for the task he has to accomplish.

Now, turn your attention for a moment to the mental phase of the defect. Realize that work in this line prompts and promotes a cure. As legislative bodies are divided into committees, to better perform the duties and obligations required of them, so also the brain in like manner is divided into regions, to perform the duties imposed upon it with more precision and detail.

By dividing the brain as above mentioned, we will find the following: *Intellectual, emotional, volitive, animal and basilar* regions. These respective regions are subdivided into other small regions, each having a special function to perform. It would be useless to go through the complex explanation of all the regions, especially those having no special bearing upon the subject. But we shall take up the volitive region, of which, in one of its subdivisions, we shall find lurking the difficulty, stammering. Under this division we have stability, temperance, sanity and health. We will class this region with its subdivisions as the *volitive faculties*. The generic term "will" comprehends those faculties, the action of which is termed volition. The faculties of the will are *determination, firmness, decision, ambition, authority* and *vigilance*. Here lies

the secret hiding place of the deficiency of the stammerer. Here is where we must begin our work of repair. To do so, this portion of the brain must be strengthened and developed. There is but one way to accomplish this, and that is to cultivate and strengthen will-power. To do this, the stammerer must work upon all the faculties mentioned, in fact, "he must be master of all he surveys." He must discontinue the timid and fearing way in which he is treading, and instead become master of his language. He must discontinue his thoughts of words which seem impossible for him to speak. He must give no forethought to such words, but make himself believe that there is not a word in his vocabulary which he cannot articulate.

Will should not only be observed in speech, but in every movement of the stammerer. Every step, every expression and every thought should be with firmness and determination if he wishes to be successful and accomplish his desired end. This practice is not only beneficial to the stammerer, but to any person who wishes to cultivate the faculty of will-power. The business man, doctor, orator or persons in any vocation of life, should have determination, firmness and a strong will in every respect if they wish to be successful. Then why, in a similar way, would not the stammerer be successful in overcoming his speech impediment?

Will-power is to the nervous system what steam is to an engine; without it, we are as helpless as a ship in mid-ocean, with its masts and sails a total wreck.

In establishing a cure, the stammerer must cultivate and would say it is a combined physical and mental defect. The physical defect lies in improper breathing, the mental in an undeveloped state of the volitive region of the brain. In establishing a cure, the afflicted must cultivate and improve his breathing, until he has perfect control over it. He must also strengthen and develop the volitive region of the brain. There is no other cause for stammering than stated. From a lifetime of research and diligent study, I



have come to this conclusion. You may hold the subject up in every light, and view it every form of its complexity, and you will find your thoughts coming to a rendezvous on this conclusion. The marksman trains and cultivates the eye and nerves; the prize fighter and wrestler, the muscles; the mathematician the portion of the brain that relates to and controls mathematics. Why should not the stammer train, develop and cultivate that portion of the brain which expresses thought?

If training, practice and cultivation are the means of obtaining success and perfection in all other vocations there is then no doubt but that here also lies the success of the stammerer.

## HELP FOR THE STAMMERER

Of all the afflictions that man is heir to, none bring more misery than stammering. The stammerer has his full senses and is fearfully conscious of his own defect. Many a time he has thought over his sad lot. At night he dreams of his torments of the day and in the morning, he awakens to a new day's misery. Sometimes he dreams that he has acquired free speech, but the awakening shows him the fearful truth. "Can I be cured?" is the question that ever presents itself to him. The answer is, "You can, under certain conditions." The stammerer must remember that the Almighty put him in this world for something. He should never despair, for if he is industrious, free speech will some day become a shining and glorious reality.

The stammerer should first of all *will* that he be cured. The word *will* as used here does not mean a mere acquiescence, but it means that no stone should be left unturned, nothing should be left undone, in order that he may possess untrammelled speech. He should fix this idea firmly in

mind before he begins a course of treatment, for, as the doctor says, "if the patient is confident, (i. e. feels and *will*s that he can be cured,) then the battle is half won."

But although the will is of great importance, it is not everything that makes for a cure. A systematic course of treatment is necessary. It is best for the stammerer to go to a good school. There are, however, many who cannot go, many who have duties at home which deter them for the present. To this latter class these words are mainly directed. Moreover, if this home-work is carried out, the preparation for a course will be so much the better.

The stammerer having decided to concentrate all his energy on the cure, should take pencil and paper and jot down the various useful ideas which occur to him, and which he thinks may help him in the future. He finds his thoughts falling into several divisions.

He knows he stammers. He knows it causes a great misery. He knows that his inferiors are passing him in the race of life, merely because he cannot speak easily his ideas and opinions. Sometimes an inferior with swagger and bluster imposes on the world, while the afflicted one, far more capable aside from his speech, must be silent and ponder over his misfortune. Has not the stammerer been thought dull, and has he not been mocked on account of this impediment? Let him resolve that his speech must be free and that he *will* obtain recognition from the world.

Now come the questions, "What caused me to be thus afflicted? Was it on account of sickness during infancy? Was it on account of mimicry? Did I inherit a tendency from my ancestors?" These and other questions he should put to himself, and with the help of this treatise on stammering, he may obtain an answer. He may find that it was not one cause alone, but a combination of several causes. Knowing the cause, may help decidedly in making strong the sources of weakness.

Then the stammerer should decide upon a course of treatment. As there are different forms of stammering, there are also different ways of treating cases. One

person may have more time than another. Circumstances alter cases. One can readily perceive what great value it is to attend a good school, if one has the time and means. The writer has found a great deal may be accomplished if the work of each day is systemized. There should be special attention given to the regularity of all that makes for a daily routine of health. The rising hour should not be later than half-past six in the morning. Late sleeping devitalizes rather than strengthens the body. Systematic exercise should be taken morning and evening, aside from brisk walks in the open air. While walking, give earnest attention to deep breathing. All stimulating drinks should be entirely avoided, as well as poorly-prepared and indigestible foods. Dinner should be eaten at noon, a light supper only being taken at evening. If the day's work has been a taxing one, there should be, after supper, a period of relaxation, after which read aloud from some book by a cheerful, optimistic writer. This will prove beneficial to the speech and mind.

In these days when health journals specify so particularly as to what constitutes the right care of the body, the subject of baths and food need not be enlarged upon.

Cultivate a hopeful view of life and its purposes. This attitude of mind will banish much that worries and corrodes the spirit. Think of pleasant things and seek the society of cheerful, well-balanced people.

As to speech, think what you are going to say—then speak slowly and definitely. If your thought is well poised its expression will be more tranquil.

It would not be a bad plan to copy the following little table, making such amendments thereto as would help in specific cases, but some systematic reminder of what has been resolved upon as a course, will be very helpful.

#### MORNING

Arise at 6:30 o'clock.

Drink a glass of water while dressing.

Exercise the body.

Brisk walk in open air for about 10 minutes.

Breakfast:—

Take no coffee nor tea.

Eat stale bread.

Eat plain light food, *slowly*.

#### NOON

Sip one or more glasses of water, slowly.

Dinner:—

Eat slowly and masticate well.

Avoid fatty substances and unripe animal and unripe vegetable food.

Fruit and vegetables (good).

#### AFTERNOON AND EVENING

Voice culture.

Eat supper early.

Rest half an hour after eating.

Study or work till 8 p. m.

Then read to some one aloud, using pleasant and humorous reading, or instead carry on conversation.

Retire at 9:30 p. m.

#### GENERAL RULES

Bathe four times a week, in summer, every day.

Take no alcoholic liquors.

Speak slowly and distinctly.

Before speaking, think what you are going to say, and then say it without deviating an iota from the sentence planned in the mind.

Don't worry. Don't get excited.

Think of pure and pleasant things.

Cultivate the social side of life.

This plan carried out will prove beneficial to the stammerer. It is, of course, hard to hold one's self bound to a daily course of practice. It is so easy to say, "To-morrow I'll practice." The very act of self-discipline, insistence on



doing the thing systematically planned, reacts to the advantage of the stammerer. It is one of the steps in the right education of his will. With some there is undue expectancy of a sudden cure. If this hope is not borne out, then down go the spirits, the plan in hand is abandoned and something more alluring is taken up with temporary enthusiasm. This is wrong. "Stick-to-it-iveness" is no small factor in character building. It is one no stammerer can afford to neglect. He must learn to persevere. He must endeavor to work with added zeal each new week—devoting to concentrated effort the energy previously lost in worry. The results will then surpass his fondest dreams.

### DO STAMMERERS LACK INDIVIDUALITY?

It has been argued that stammering is but a species of moral cowardice, that the stammerer lacks individuality, that his difficulty is but an evidence of lacking personality, and, in a sense, speaking purely from a moral standpoint, that he is a coward because he is afraid to attempt what others can easily accomplish. Whether these accusations be true or not, it is certain that stammerers as a class in many respects, regard themselves as unequal to others, probably because of their natural weakness (stammering), which closes many avenues leading to the goal of success, and which, but for their unfortunate condition, would otherwise welcome them. Personality is usually lacking in the stammerer.

One of the most wonderful things we notice in looking into a hundred or a thousand faces, says one writer: is that no one of them looks exactly like any other; all have many things in common, but each has about it that indescribable something that we call personality.

Did you ever think how much depends upon personality?

I walked down town this morning, but came back on a trolley car. There was a man on the car whose personality overshadowed everything else. I supposed I knew as much about ordinary things as the man who was running that car, but I had no right to touch the handle of it or to try to run it. There were some things that indicated that the individual, his personality, was the controlling power that moved the whole thing.

We sometimes say that when a man dies, it is like putting your finger in water and taking it out—it makes no difference. That is true in a sense, yet I believe that each one of us fills a part of life which no one else could fill. The essential characteristic of every individual is, shall I say, beyond action and above action? It is that which he puts into his thoughts and purposes, as well as his action, and which creates influence. Influence is one of those things we can never measure. I have just come from the room where I saw the machine by which muscular strength is tested. But there is something back of that which charts will not measure, and that is a wonderful something called vitality, or life. Besides that, there is individuality; and the mystery of individuality is as great, in many respects, as the mystery of life.

You are probably not conscious of your individuality. Did you ever say to yourself after shaking hands with some stranger, "I ought to know that man, at least I should like to know him?" At another time you meet a man, but you shrink from him as you would from an iceberg. Why is this?—It is because you were struck by the unconscious individuality of these men; they were not conscious of their individuality, and you were not conscious of yours. Your largest influence is probably your unconscious influence; it is unconsciously given off so far as you are concerned, and unconsciously received, so far as others are concerned. If I could by some movement of my hand just now, take that subtle thing called "influence," and portray just what lines of it are going out from your lives to other lives, I am sure I should have a wonderful picture.

I would impress upon you this thought, that to give out such an influence as you ought, to be able to put into your lives that which will make other lives better, you must *be something*. The pagan religions say, "Do something, that you may attain." But Christianity says, "Be something that you may do something and therefore may attain." So my thought is this: You must be everything you ought to be, in order that the best unconscious influence may go out from you. The inner life has, in a peculiar sense, a moral and intellectual odor, and this I call the unconscious influence that goes out from you. Make your inner life, then, when measured by the most rigid test, the noblest and purest possible.

You say, "These muscles are weak; they must be trained," and take physical exercise in the gymnasium,—you fairly burn the midnight oil in seeking physical improvement. Now, you must do the same thing with respect to your inner life.

I once knew a very good man, a teacher, one of those unfortunate men who want to lead people. He used to say, "I just know that if people would let me have my way, I should be a great leader." But other people would not let him have his way. The men and women who are always striving to lead, never succeed. Men and women whose personality is so developed in their lives that they are always doing the things that people admire and love, will lead without effort; true, there are many who would like to pull them down, but that is neither here nor there, as regards the principle. Be yourself what you ought to be, and you will succeed.

Let me urge upon you the fact that the place you are to fill will be measured by your individuality. You are an important part of the great whole. You may be tempted to say, "I am only one out of a hundred, and if I do not do this work, some one else will do it." This is a mistake. Some one else will do his work, but that will not be your work. Some one else may accomplish what you ought to accomplish, and you may be pushed aside and left like the debris thrown upon the banks of a stream by high

water, but that is a failure. Don't feel that you can leave a single thing that you should do, for some one else to do. Let every ounce of power at your command be given to the performance of the duty which lies nearest you, and let nothing be thought too small to be considered in the light of a sacred trust.

We have a way of asking busy men to do things for us, and to help us. Why?—Because it is the busy men who succeed; they succeed because they are busy in looking after every detail of their business, and in seeing that it is well done. Do you remember the story of the Boston millionaire? Some one in conversation with him remarked that he had understood that when he was a boy, he had not had much of a chance. "Why," said he, "I have heard men say that they remembered you when you were nothing but a drummer-boy." Well," said the millionaire, "didn't I drum well?" Conscientious care and painstaking is the secret of success. If you are to dig a hole in the ground, dig the hole as it ought to be dug. Follow this rule until it becomes a habit, a part of your nature. Reach perfection, so far as it can be attained, but in everything put forth the highest endeavor.

I think it was Oliver Wendell Holmes who said, "There are two things which are immortal,—a tree and truth." The tree may represent the earthly side of life, and truth the heavenly side; but God is the one great end and fact; and if you are linked with truth, you are linked with God; and if you are linked with God, the results of your work will be immeasurably greater than if you were linked with earth, and, for you, the future will be a state of everlasting blessedness."

Some one said, "Within yourself lies the cause of whatever enters into your life." What is the character of your thoughts? On that depends more than you realize. Thoughts are living forces, each producing its kind. Good, happy, agreeable thoughts stimulate the brain cells to manufacture energy and build up the body, while immoral thoughts destroy energy, impede the circulation and produce ill-health. Healthy thoughts are as essential to a



healthy and well-developed body as virtuous thoughts to a pure life, so therefore infuse healthy thoughts into your everyday life, for health and stammering are related. In the proportion that our health attains perfection, will our stammering be less severe. It is the imperative duty of every stammerer to acquire such a knowledge of himself as will enable him to preserve the greatest of all blessings, health. Do not dwell upon your ailment and never allow yourself to be persuaded that you are not complete master of yourself. Preoccupy the mind with the painstaking cultivation of virtue. Nothing of value is ever obtained without some effort or cost. You must not be content with present conditions, the mere creature of circumstance. The elements of success are around you. Action, ceaseless action, is the price, eternal vigilance leads to victory. Implant—*I can, must, and will do better than this*—deep in your mind and let determination be your watchword, then and then only will you exchange weakness for strength, impotence for power. To think success, brings success. Man has ever been strongly influenced by his ideals. The attainment of your intellectual, moral and physical perfection is your ideal. Strive for it no matter if it is far distant; the struggle will increase your powers and ennoble your character. Assume the part or character you desire to play in life's drama.

## THE COMMON SENSE VIEW OF STAMMERING AND ITS TREATMENT

Man, in the image of his Creator, was destined for the highest place in the universe. But it is strange that he must acquire that place for himself. In the infancy of the race, he starts out without language, either spoken or written,—in fact, without speech of any kind, except that of the cry of the barbarian. Ignorant, thoughtless,

speechless, he faces an unknown world—not alone the unknown Divinity. He forces his way onward and upward and by the power within he has conquered. He first communicates the stray thoughts that form in the hidden reserves of his brain to the outer world by gestures, next by his cries, and then by speech called language, and finally uses symbols or hieroglyphics as the signs of his articulate sounds.

Thus with four means of communication he has risen to heights which transcend even the imagination. But all men have not reached this state. They are not mentally, morally or physically endowed with the same characteristics. We still have here and there throughout the world many unable to talk. In his early childhood this one acquired an incorrect utterance and through the ignorance or neglect of his teachers and parents this incorrect utterance became a confirmed habit. When he confronts the world for place he finds a battle to be fought before victory can be his. Then all the powers within him are summoned and employed in the battle of his life. Only stammerers can picture the mental anguish or describe intelligently how this reacts on their whole nature and stamps its lines of desolation upon their faces—and even hope engendered in the human breast dies as if by the hand of self,—inadequate ability to express himself in speech becomes the cause of the sorrow of life.

It is the natural desire to talk, to communicate with others. Human speech is the physical agent of the expression of our thoughts. Careful training, not only regarding impediments but the cultivation of the voice so as to express our feelings or suppress them, if necessary, and the acquisition of fluency and ease should engage the careful attention of every stammerer. No man can estimate the power, or foretell the influence we may exert, by the rightful use of speech.

There is a distinction between speech and voice. Voice is defined, as the sound produced by the vibration of the vocal cords, while speech is voice modulated by the

throat, tongue, teeth, palate and lips. However, speech may exist, as in whispering, without voice, and voice may exist without speech, but the terms are relative and the distinction too finely drawn for our subject. Suffice it to say, we must have this vibration of the vocal cords to produce ordinary speech. In whispering, there is scarcely a tendency to stammer, which shows the anatomy of the vocal organs normal. Singing, public speaking and the correct use of the same words that could not (a few moments before) be pronounced at all, prove that the stammerer's vocal organism is not affected. Stammering is exhibited in a marked degree in ordinary conversation and in personal contact. In speaking over the telephone, the difficulty is usually more marked. As a rule, it depends upon the condition of the individual. If the motor nerves are overcharged or irritated abnormally, no matter from what influence, either within or without, stammering will result, as these nerves fail to control the muscles involved in speech-production. Herein the difficulty lies and the remedy, in theory at least, is self-evident. Respiration is also affected by the mental conditions present in stammering. The motor nerves in respiration are the intercostal nerves supplying the intercostal muscles and the phrenic nerve supplying the diaphragm. Their action may become abnormal if the nervous system is agitated, and consequently the proper air supply is cut off, making the production of speech impossible.

To steam and its work in the mechanism on the locomotive, we may compare the human mechanism which employs air for life and speech. The lungs are the air-pump of the human machine. The supply of air depends on the lung capacity in expansion and contraction. So many cubic inches are inhaled at each stroke or inspiration and so many are given out at each exhaust or expiration. The human voice depends entirely for its working on the flow of expired air over the vocal cords, just the same as the influence of the high power brake on the

mighty engine in its onward course depends upon the volume and pressure in its cylinders for its effective work, and its smooth working to the touch of the engineer. Smooth speech is produced by an act of the will. In both cases, absolute control of the flow of air does the proper work, otherwise the train would be telescoped in the one case and the man agitated and transfixed in the other. Of course, the vibration of the vocal cords depends on their tension and parallelism, and this depends upon the contraction of certain muscles called crico-thyroid and thyro-artenoid. These muscles at the instant of volition give the proper position to these cords. Other muscles also controlling the lips, tongue, mouth and nose act conjunctively in voice production, and their proper working depends on their controlling nerves. The nerves control muscular action and the nervous system must be cared for. All excesses in work, study or pleasure must be avoided. Likewise all drains upon the nervous system, and the uses of narcotics and stimulants must be discontinued.

Any weak vital organ will perform its duty when given the power to act. This power lies wholly in the nerves. It is necessary, therefore, to strengthen the nerves, and while doing this you strengthen all the organs of the body. Stammering is the offspring of a mental condition and not a defect of the vocal organism; the vocal organs are, as a rule, normal in every stammerer. Of course, through nervous disorder engendered by stammering, the organs of respiration and of voice may be incapacitated, but the parent cause is rooted in the great nerve center, the brain, and consequently the mind which acts through this medium. The stammerer may ascribe his impediment to other causes, and really they do affect him to a great extent, such as colds, long hours of work, sleepless nights, anger, sudden events, etc., but all these and numerous others affect directly his nervous system, causing the electric current of speech to break and his efforts at fluent speech to become futile.



We learn in natural philosophy that every action is equal to a reaction and in a contrary direction. And thus mentally we may state that every impression that comes from without goes back through the nerves and finds expression in the human voice. The thought travels over these electric wires, as it were, forming the complete circuit in the living voice. If speech is stopped or impeded, the circuit is broken or "short circuited" and the mind, the human dynamo of thought and control, is separated from the thought, and confusion results. It therefore, must be again rightfully connected or continued stammering is the result. Determination, patience and practice will be necessary for this absolute control. Power, the talismanic word of Habid in the Arabian Nights, must be ours in these times that try men's souls. It must be the power to control, to *will* and to execute.

Any one familiar with the subject of electricity understands why the armature or commutator bars and brushes of the dynamo produce sparking, and how the proper adjustment will prevent it. In comparison, it might be said, any one familiar with speech-production may be able to account for stammering and suggest proper methods to follow in breathing and different positions for the speech-producing organs to assume for each sound or word. But, as in the one case, it takes the skill of the electrical engineer, so in the other, experience and skill will be necessary whether it is acquired through years of successive failures by the stammerer himself or by the aid of a competent instructor. In this connection it might be said that all the schools in Christendom cannot permanently cure this defect without the hearty coöperation of the pupil. The stammerer himself must work, mind and body, in order to effect his cure. Of course, the school should give intelligent and well-arranged drill, thus developing certain unused muscles, and adding tone to the nervous system, establishing confidence leading up to the cure through acquisition of control.

Extraordinary diseases or defects will require extra-

ordinary treatment. By this is not meant that unknown remedies are to be sought, but the careful application of the known ones that will produce a permanent cure. These must be constantly applied in order to eradicate the disease. There is no royal road to medicine, surgery or knowledge of any kind. Nor can we acquire skill in speaking unless by constant practice we make fluent speech habitual. It takes the child years to learn to talk rightly. The stammerer may have an advantage over the child in that he already possesses the thought and its vocabulary for expression; but to attain freedom of speech itself will require a double training; he must overcome incorrect habits and establish perfect volition.

The act of speaking should, in itself, be unconsciously performed. The mind should direct the thought, and these delicately adjusted and rapid movements of the vocal organs should go on by reflex action without the mind interfering; the thought in itself producing sufficient expression regarding range and modulation of the voice into speech. It is only when we let the mind interfere in bringing up the fear of another blunder on certain hideous words, that have been our stumbling block, that stammering occurs. Control the mind or keep it on the thought or train it to bring forth another thought, when these words come up unbidden, and you will not only give voice to the first thought, but the very words that have been most bothersome, will come forth easily.

The mind should be the governor of the body. The nerves, muscles, ligaments, organs of circulation, of digestion, are all affected by the condition of the mind, again the mind is, on the other hand, affected by the condition of these organs, as there is a sympathetic relation between them. Therefore, a properly balanced mind must be secured. Without balance and equilibrium, stammering will continue. Some diseases are eradicated by proper mental control. So much depends upon the mind that so-called magnetic sciences have been formulated, claiming wonderful things in the way of successful heal-

ing, even professing by this means to effect a permanent cure for stammering. In any event, self-control must form the basis for the cure. No matter what remedies are applied, either internally or externally, if the patient cannot control his mental activities, he will never be able to say he is free from this defect. He must learn to be at ease in the presence of others and forget self entirely. Endeavor to keep fear from harassing the nervous system and consequently impeding the natural muscular action. Fear keeps the whole frame in a trembling palsy. Cultivate the power of concentration and, if necessary, bring every faculty to the rescue. Read good, wholesome literature and but little exciting fiction; especially cultivate the acquaintance of those books and conditions that will bring calm to the mind, assuring rest and recreation to the entire system.

As the healthy activities of life are carried forward by proper conditions regarding diet, air, water, exercise, and occupation, it behooves us to regard all things making for health. Your cure will be influenced largely by health, without which it is difficult to establish nerve control. The house in which you live must be taken care of, or paralyzed efforts will be the result. Especially is this true of the brain, the organ of the mind, for it is constantly undergoing changes. Changes occur oftener in this organ, than in any other in the human body, and it will, therefore, need the most careful attention regarding proper sleep, nutrition and exercise as a safeguard against its abuse.

The organs of respiration must have their share of development in order to make them do their part in control. They are a sort of triple valve, as a threefold duty is performed by them, admitting air to blood, carrying off waste matter and by proper control, letting the air flow over the vocal cords, producing speech. This mechanism must work perfectly, for it is so delicately adjusted, one inharmonious movement will affect the whole mechanism and difficulty in speech will result. Walk

erect, have a military bearing, for this distends the chest, developing the respiratory muscles. Exercise with discretion, having due regard for your physical endurance. Train yourself to proper methods in work, study and pleasure and have regular periods for each.

Every man should try to attain perfection. He should cultivate every faculty of his composite nature, soul, mind and body. Constant systematic training in the right direction will accomplish the desired results, as a rule; haphazard practice, never. The best known scientific means must be employed in all cases. There is no use to take the stage coach when we can travel by the electric car. No use to practice exhaustive military drills when gymnastics will prove the most beneficial, especially to the stammerer. Intelligent exercises in moderation, at regular times, must be practiced. The aid of a skillful director may have to be called in, for it's slow work to be your own teacher, especially so when you have no well-defined method of procedure or systematic arrangement and scientific knowledge of the remedies to be applied in your particular case. Courage must be the watchword. No matter what is attempted in the desperate game of life, there must be courage to carry it to a successful issue. The thought of never giving up, must become second nature with the stammerer. He must triumph. He cannot afford to fail in anything, no matter how trivial, as it will affect him in his own estimation and cause him to depreciate his other qualities. He must never enter with fear the path which leads to honor and success. Fear must be relegated and entire confidence in his own possibilities established. Thus achievement and mastery will be to his credit. This must be the key to his prevailing thought and this will unlock the seemingly barred door of expression and add to the world's work another useful participant.

We are commercial as well as social beings. Our services in some capacity are for sale. Trades and professions are full of competition. Our services to be engaged



must be superior to those of our fellows. All defects must be concealed or removed or they will, like a phantom, rise before us to lessen our chances of success, and consequently lessen our value in the business world. Every defect in our character, in address, will be magnified in the light of strong competition. Should we seek honors or emoluments of office, our opponents will picture our defects in the most vivid terms to allure the friendly from our support. Stammerers should not only get rid of their defect, but should show to the world their real merit and capability for the position they seek. We should search for knowledge and the means of ridding ourselves of this remorse, and, if persistent, we will not only find the means but permanently acquire the habit of earnest endeavor in every line of work in which we may engage. The defect in itself may be a blessing in disguise and give us an impetus to future acquisition.

There is a distinction between stammering and stuttering. The latter is a condition of the vocal organs where, through lack of proper control of the muscular action, they constantly repeat, or it may be called a disturbance of the coördinating mechanism. Stammering is a stoppage or failure to produce sound at all, on account of not retaining sufficient air in the lungs or hindering the vocal organs in assuming the proper forms to produce the necessary sounds. Correct breathing and vocalization will remedy the habit of stuttering, while right mental training, together with proper development and control of the respiratory and vocal muscles will correct the stammerer.

Stammerers are not by any means the most afflicted. We see every day cripples in body, intellect, and soul. Some more seriously affected than others. These defects, to the student of physiology, ethics, or psychology are just as apparent as the physical defect of stammering is to the world at large. The common people may not understand, but these exist, and in no small degree, even though less painful to the sufferer on account of lack of

appreciative knowledge or because unnoticed by the public. The human family is peculiar in this respect, for there is, perhaps, not a man that is absolutely perfect. He may be highly educated, brilliant as a constellation, still in morality may be deficient. Or he may be physically perfect, but lacking intellectual development. He may be undeveloped in body, awkward, uncouth, maimed in limb or deformed; eyesight defective, having impaired and innumerable defects which are worse and more unsightly than is stammering. This, however, does not make the stammerer any less anxious to free himself from his impediment.

Stammerers should cultivate a courageous demeanor; look every man in the eye. Cultivate a genial disposition. Be sincere and affable. Try to maintain a friend's attitude toward work and toward those with whom you come in daily contact. Study human nature and your surroundings. Do not worry over past troubles nor anticipate future ones. Let each day take care of itself, but prepare so that to-morrow will be brighter than to-day.

There are two classes of people, those who are determined to succeed at all hazards, and those who believe they cannot succeed under *any* condition. It matters not whether they are stammerers, stutterers, or without any defect. Those who are determined, will make all impediments or obstacles stepping stones in their pathway to success, while the other class will throw obstacles before themselves, magnifying them. Instead of traveling by a direct route, some take a circuitous one of their own. The great majority belong to this class and truly, as Emerson has said, "their thoughts and deeds go in circles, having the same radius for each new ambition or enterprise." As stammerers, you must expand not only in one particular phase of your life, but in all—body, mind and soul—persevering to the end.

Standing upon the cold, barren mountains of Nome, Alaska, the question forced itself upon me: "Why did creation seemingly leave these mighty mountains unfin-

ished, fruitless, lifeless?" . Was it to teach man all things are not on the surface, but to dig deep into the mountain to obtain the precious metals; this truth demonstrated by millions of dollars in gold being shipped from these mountains? And another thought came: if men would risk their lives in the mad search for gold, leaving home and friends, why would not a stammerer make a similar sacrifice for free speech? Nothing attempted, nothing gained. If no energy is wasted, no energy can be stored. It takes potential power to gain kinetic power. The initiative must be taken and opportunity grasped on presentation. Instruction is necessary.

It is necessary to train the muscular adjustment to work with rapidity and smoothness and to have the respiratory movements in expiration to occur regularly and to allow a small interval of time for each sound or word. It is necessary to learn how we produce the consonants. It is necessary to practice vocal exercises. But the point is to get free from these paroxysms of fear and inability of utterance. Others have done so, and why not you? Men having once conquered this defect, have risen to the highest places in national life and have had their names recorded in the world's history.

In conclusion, I might say the cure depends upon the establishment of right mental and physical conditions, accomplished by proper training and exercise. There should be effort to control the emotions. Thus started on the road of success in speech, new hope will appear, the world with its life and beauty will become to you a perpetual delight, the cares will vanish, the prosaic will become poetic and visions of happiness, which for many long years were of your imagination, will become realities.

## MENTAL EMOTION, IN THE EXPERIENCE OF A REFORMED STAMMERER

"Pins have saved thousands of babies' lives," quoth the small boy, reading from his composition.

"Stop there," interrupted his astonished teacher, "how, pray?"

"By the babies not swallowing 'em," confidently replied the youngster.

To the reformed stammerer, *mental emotion* is what he hasn't got, that, conversely, used to have him—with a vengeance.

But "old things have passed away, behold, all things have become new!"

The evolution of the stammerer in eliminating *mental emotion* from his economy, and expurgating the term from his lexicon, may be described as three stages:

First. Earnestness. He comes, believing.

Second. Enthusiasm. He takes hold—the means, to an end.

Third. Harmony. Triumph, the reward.

It is not straining the figure to speak of these three as "the graces." They are that to the reformed stammerer. Faith, in the beginning. Hope, blossoming into Love, in fruition.

"A three-fold cord cannot be broken." By the same token the stammerer becomes invincible. He has brought order out of chaos, harmony from discord. The world seemed wrong side up, before, because *he* was upside down, where *now* he is right side up.

And now abideth these three. One may express it in nature or in the spiritual world. What is nature? God! What is God? Love! What is Love? Harmony! And in the evolution of the stammerer from the abnormal into the natural, harmony is the desideratum—the end. The



animus of the stammerer, void of faith and hopeless, finds eloquent expression in the blind protest:

“I am one, my liege,  
Whom the vile blows and buffets of the world have  
so incensed  
That I am reckless, what I do,  
To spite the world.”

In the passing of the old and the advent of the new, comes a mellowing, the expulsive power of a new affection. In the arid soul of the misanthrope now flows the milk of human kindness.

“And now abideth Faith, Hope and Love—these three, but the greatest of these is Love”—which is harmony. Harmony presupposes control. “*Applicacion es el solo modo de aprenderla*”—which is the Spanish way of saying to the stammerer: “Apply yourself, and you’ll ‘get there!’”

Your spectre of mental emotion, like the tin can disengaged from the caudal appendage of the hopeless village dog, is a thing of the past.

Digressing from the technical idea of mental emotion, we say: The well-balanced man is equally head and heart. To the heart, now, shall belong the monopoly of emotion, and well-springs of delight, new emotions stir in the heart of the redeemed stammerer when mental emotion is banished. This hope, which has found happy realization in my own life, I hold out to the worst stammerer. In faithful application and adherence to the *raison rational* of the ideal system which is epitomized in: “Deep and full, but gentle breathing, firm and easy vocalization, wide and free articulation.”

Its inimitable arrangement, combining the recovering of lost balance with admirably arranged, physical culture exercises; then, vocalization;; finding the voice and speech from its elements, going back and beginning with first principles and intelligently and triumphantly working up to complete coördination, whereby the imperfect, lacerated speech, an abortion to the ear, becomes as music, in

perfect control of the speaker, whose firm, resonant tones demonstrate that a defect is converted into a beauty and a thing of beauty that is to be a joy forever, to the erstwhile stammerer, who appreciates that every good gift and every perfect gift is from above, and that the gift most good and perfect to him is free speech.

The mental paralysis (mental emotion) that formerly preceded his pusillanimous or half-hearted attempt to express himself in speech, has vanished like a haunting dream. Just as surely as "two things cannot occupy the same place at the same time," or that "nature abhors a vacuum," so surely has he crowded out the bad by the good, the wrong by the right, the spasmodic and sometimes non-responsive by the easy and natural, precipitation by deliberation, in short, the abnormal by the normal and graceful.

The temporary damming up of Niagara, which lasted but a few hours, exposing to view the dry river-bed, that perhaps in many centuries human eye had not beheld, was no criterion of the natural state of the Falls, and it would be just as illogical for the uninitiated to argue that the *hors du combat* stammerer, helpless in the throes, is in, for him, a natural condition.

Only the stammerer himself can eloquently feel and never adequately describe his sensations of misery.

He alone can tell, who has suffered the exquisite torments of mental anguish and humiliation of soul—the despised stammerer, hoping against hope with the hope deferred that maketh the heart sick—ten, twenty, mayhap fifty years without relief.

Our "old man of the sea," with a grip at the throat that argues possession nine points of the law, may be finally shaken off. With something more and better than the mild curiosity of the man who first gets a glimpse of the back of his own head, the no-more-despairing stammerer may now get His Satanic Majesty (stammering) by the tail and delight his friends and himself by occasionally, so to speak, twisting the same in a peroration,

*a la* Demosthenes, just to let himself out and demonstrate that the stammerer has conquered and is conqueror.

Warmly greeting, in chance meeting, the son of an old friend, a practical man of the day, inquired affectionately of his young traveling companion: "And what are you going to be?" "A minister of the Gospel," replied the young man, stammering fearfully. "Well, er, how," asked his blunt elder friend, "how will you be able to preach?" Stammering worse, but with some show of dignity, the young man rejoined: "The Lord will put the words in my mouth!" "Aye; but who's going to get them out?" remorselessly pursued the old man.

This, to the stammerer, is the eternal question: How? Our theme is the question and the answer together. Oh! it's easy when you know how. You may bring a horse to water; you can't *make* him drink. Yet the stammerer, young or old, of greater or less intelligence, willing and tremendously in earnest, may banish his mental emotion effectually, and so annihilate his stammering. The writer's cure was gratifying in its speediness.

A close acquaintance with the method pursued, demonstrated:

1st. His need of unlearning wrong "methods of attack," by endeavoring not to talk hard, but to talk with ease—relaxation.

2d. By trying to vocalize, not without breath, but with it.

3d. In awaking to the fact that he has a diaphragm and that hereafter, asleep or awake, he is to live in the sure consciousness of that organ and its function.

Most people are unaware, so far as consciousness of it is concerned, that they have lower lobes to their lungs. The lower lungs, properly employed, the breather is insured against attack of the apex of the lungs, where dread consumption begins its work.

Nine out of ten people, perhaps, do not breathe properly, *i. e.*, with deep breathing. Were the necessity of deep breathing generally taught and followed, the fear-

ful ravages of consumption would be stayed and the next generation would be less fatally pursued by pulmonary troubles than the present age is by smallpox.

It is not the purpose of the writer to technically and at length discuss the admirably arranged physical culture exercises that make the student master of natural or deep breathing or the "method of attack" that makes continuous sounds, vowels and closed consonants lose their terror in the rational method inculcated by the modern system and vanish like fantastic gruesome shapes and shadows of night before the rising orb of day. Collectively, these mean the banishment of mental emotion, the stammerer's "bugaboo."

It is reiteration to point out that, futile as Ajax defying the lightning, or the folly of butting against the law of gravitation, the person of normal speech who should, like the stammerer, in sheer violation of the laws of speech, attempt to utter an obstructed consonant with hermetically sealed lips, or aspirate a vowel on exhausted breath, or express a continuous sound without opening the lips, would succeed not half so well; or if self-hypnotized, like the stammerer, into the belief that deficient enervation was constitutional, the same person of normal speech would be hopelessly mute. With stammerers, the standard of intelligence compares favorably, and is often higher than the average among the exempt. Indeed, close study and observation show the artistic sense is often finer, the sensibilities quicker, the sympathies warmer, the soul more altruistic. Give me a reformed stammerer every time for a beneficent work that calls for patience, devotion and self-sacrifice.

The river, unstemmed, pours musically, rejoicing, where barren dryness ruled. The chained eagle, his fetters broken, with triumphant scream, his glance riveted on the glorious sun, soars in majestic circles higher and higher in the blue empyrean. Not less is he free and king, the redeemed stammerer, his birthright restored. We may deny the doctrine that the world owes every man a living, but science does owe the stammerer free speech.



## CORRECTING SPEECH DEFECTS

To secure perfect speech, the stammerer is to take up from the beginning of his remedial efforts two distinct lines of training. These to a large extent will be united in the exercises, yet each will require a separate, constant and thoughtful attention until the desired object is fully attained. The first of these refers directly to the use of the vocal organs to secure perfect speech; the other to the development of good voice power. That these objects may be most surely and speedily attained, the learner should impress the following points indelibly upon his attention until complete success crowns his efforts.

First: you have perfect vocal organs and can speak as well as others do. For instance, you stammer in school on a sentence; the teacher repeats it and tells the class to repeat it with him again, and you speak every word as easily and as clearly as they. Your vocal organs are as perfect as theirs or you could not do this. Mark this well. You have perfect organs and can speak as well as others. Now, why do you not always speak perfectly? When reading in concert you had no fear of stammering; you did not even think of it; you forgot for the time that you did stammer.

Second: You must *forget* that you stammer. Your mind must be kept off your defect. Think of something else. Each instructor will give special directions to aid in this. The next point is also intended to be helpful in this direction.

Third: Cultivate a determined *will*-power. As you can sometimes speak as easily and as perfectly as others, determine that you *will* do it at all times. You can do it; make up your mind that you *will*. To simply say, "I'll try," is not enough. It has an element of weakness in

it; it implies a doubt; this invites failure. Bear in mind that you can, and throw your will-power into it. With all the determination of your being say, *I will* to do it. I WILL do it. I WILL. Let this be your motto. Keep thinking it and saying it over and over again. Occasionally change the emphasis and make the "I" strong. Say *I will*, and work for it until you thoroughly believe and make it true. You can succeed. You may stumble again and again, but do not let this weaken your *will*. Let each rebuff double your determination to succeed.

Fourth: Stammering is largely a habit. Habit is formed like a cable. Each repetition weaves a thread of it until it becomes very strong. For years the stammerer has been weaving this cable, and it cannot be easily broken, but he can stop weaving it and begin to form the right habit. It will not be completed in a day, but it can be made strong in less time than he has been strengthening the wrong habit. The use of rules can soon be acquired under an experienced tutor, by which the learner can talk without stammering. The length of time, with fair health, depends upon the pupil's quickness of apprehension and faithfulness in application. But when the use of these rules is acquired, the cure is not accomplished; it is only begun. The pupil is now to watch thoughtfully and closely each word spoken to form and fix right habits of the faulty organs until the wrong habits have lost their power and right ones have been woven so strong that they will not break. Then no rules nor thought of them is needed. Then, and not until then, will the cure be complete.

Fifth: Be cheerful. Knowing that you can speak as others do, and having a determined *will* to make it an accomplished fact, you certainly have good reason to be cheerful. Cultivate, then, a cheerful disposition as a habitual state of mind. Throw your *will*-power into this. Let your face show it. Greet with a smile each one you meet.

The thing that goes the farthest  
Toward making life worth while,  
That costs the least and does the most,  
Is just a pleasant smile.  
So smile away; folks understand  
What by a smile is meant;  
It's worth a million dollars and  
It doesn't cost a cent.

Look right into the eyes of the one addressed when you speak. Do not let the countenance fall or the face turn away, as stammerers often do. Feel that you are as good as they, with determination to be so in speech. This you can do by your *will-power*, and the doing of it will strengthen that power. Do not let failures daunt you. Who does not make mistakes?

Sixth: Erect position. Stand up, as a man should, in a natural, erect position, just as a trained soldier stands. The West Point graduate is a good example of the man who is to conquer. Head up, face directly forward, chest high. Assume this attitude and maintain it at all times; when you walk, stand or sit; when you rest, read, write or eat; anywhere, everywhere. If you are inclined to stoop and cramp the chest, it will help correct the fault if, while standing or walking, you force the center of the chest far up. It may be difficult to establish this bearing, but it is important in securing well-developed chest and lungs which are necessary for good voice power. It also improves the health, and without good health it is impossible to have the best use of the voice.

Seventh: The nostrils are the proper external organs of normal breathing. Healthy persons do not keep the mouth open to breathe. Only under some abnormal condition, such as the stoppage of the nasal passages or violent exertion, is the mouth properly used for breathing. Let the pupil bear this in mind and always breathe through the nostrils. Keep the mouth closed when not speaking. In talking and reading, first

inhale a natural breath, not too full, with the lips gently closed, and in speaking, open the mouth as the syllables of the words require. Incorrect breathing is not the cause of stammering, but is often the outgrowth of it, and if one will see to it that he breathes correctly there will be less stammering.

Finally: Never be caught off your guard. Eternal vigilance is the price of liberty here, as well as on other battlefields of freedom. Take this as a precaution: always when going to speak, thoughtfully close the lips, inhale in a natural, easy manner, and then begin instantly but calmly.

Arrange a program for your day's work and carry it out as regularly as you can. Begin and end the day with some breathing and vocal work. Do not weary the vocal organs by too long practice of reading or other exercises at one time.

While endeavoring to overcome your defect, strive for concentration on the work in hand. Avoid late hours, narcotics, intoxicants and excesses of every kind. Reserve all your forces for this victory. Make it sure. You *can* succeed if you *will*.



## STAMMERING PSYCHOLOGICALLY CONSID- ERED WITH SOME PRACTICAL SUGGES- TIONS OFFERED AS TO ITS CURE

The seat of the mind is in the gray matter of the brain, the intellectual centers being in that portion known as the frontal lobes.

In mental operations we evolve thought, which causes a slight elevation of temperature, a rearrangement of the brain cells involved and necessarily an expenditure of energy.

The brain in its many subdivisions contains many centers which have for their ends the control of functions situated in the physical organism; for example, the muscles concerned in the production of speech are connected by means of nerves (or wires) with a special center in the brain which has for its office the power of commanding through impulses transmitted by these nerves or wires—perfect articulation.

In all except the stammerer such perfect harmony exists between the muscles concerned in speech and the special center that the result is easy speech without fear of trouble; but to the stammerer quite another picture presents itself. Having failed to enunciate properly so many times in his early youth, he develops a mental condition known as mental emotion which, to the stammerer, is the fear of the inability to speak; such a condition leading to high nervous tension, which in turn is manifested physically by great rigidity or spasm of the muscles of the mouth and great effort at production.

There is in his, the stammerer's case, then, a lack of discipline of the muscles of the mouth in responding to the mental commands given. Now, to remedy such a

defect, the natural suggestion would be to bring about discipline, and the next question would be how may that be accomplished to the best advantage. In treating this all-important question, if the reader will follow me I shall endeavor to state in a practical way the principles which should bring about discipline if properly carried into execution. As to the first cause—fear or mental emotion—attention to the following truisms will prove beneficial:

1. The action of any organ in the body can be increased, diminished or completely arrested, by pricking with an instrument the center of control in the brain; this scientific fact has been demonstrated hundreds of times, thus proving that the condition of the nervous system governs the individual.

2. Fear will cause disease by deranging the system—the emotion of fear frequently upsets the stomach, destroys appetite and has even caused death.

3. Trouble is always preceded by the fear of trouble, which proves ten times worse than the real thing.

4. Nervousness is an effect, not a cause, but we allow nervousness through fear to become the producer or cause of our stammering, when if we dispensed with fear as the first cause we would immediately do away with the stammerer's worst enemy.

5. The fear of the inability to speak correctly precludes the possibility of speaking correctly, owing to the fact that fear depresses the center which controls speech.

6. Fearing impending danger adds ten fold to the danger; as an instance—the man fearing the inability to overcome approaching danger suffers a greater shock and sometimes dies as a result of such; whereas a stronger nervous organism would have pulled him through and even caused an escape by collected energies being able to organize successfully against the object.

7. Fear is imaginative only; as an instance—a brave man had never lost his nerve on the approach of any

outward danger, but he could not stand a dark room—which reminded him of ghosts and other stories heard in his youth.

8. Fear to the stammerer is like carbonic acid gas pumped into one's atmosphere; it causes mental and physical asphyxiation.

9. We are the sum of our impressions.

10. Things that we know to be untrue may become a reality by constant repetition.

11. A good way to remain cheerful in your work is not to say, I've only accomplished ten per cent of my task, but to say, I've only ninety per cent more to accomplish.

12. Trouble is big enough when it comes, without your building upon it before its arrival.

13. The best way, I know, in which a stammerer may control such emotional phenomena that arise in him, is to think of what disasters follow the anticipation of trouble and how he may prevent them by refusing to acknowledge the primary factor or cause which is the fear of trouble.

14. It is known that every normal change is for the better; it stands to reason that proper mental and physical exercise in restoring or giving renewed tone to over-sensitive nervous and muscular fibres, by causing a rearrangement of their cells, would prove most beneficial indeed.

Confidence will take the place of fear if allowed to do so. The principles for the cure of stammering enable you to talk so unhesitatingly that you are inspired by confidence. The following are some of the principles which prove all-important factors in relieving one of his difficulties.

By "method of attack," we mean the mental and physical application of certain principles which enable you to produce certain sounds, syllables or words difficult of utterance. To begin with, in touching upon the practical application of certain principles, I might mention as the

fundamental principle, that of *opposition* which is the underlying principle all the way through.

In the effort to enunciate those sounds which cause a complete obstruction of the breath, such as in the sound of the letter *p*, you have here excessive mental desire for utterance, accompanied by physical effort, which is unnatural. The remedy, viz.: mental relaxation, accompanied by little effort, using the whispered utterance is suggested.

In those letters which continue their initial sound without change, such as noted in the letter *s*, the manifestation is continuous effort at production. The principle of *opposition* still holds good, viz.: for excessive mental desire for utterance, the opposite is advised; (1) mental relaxation; (2) physical relaxation of the muscles as contrasted with rigidity, and (3) the open position of the mouth.

As to the vowel sounds, I will say the syllable construction of a word is governed by the number of vowels contained therein; there being always a vowel in every syllable. Now, it is known that stammerers have very little trouble with vowels except at the beginning of a word. It is scientifically known that in stammerers hesitating on vowels, the vocal cords concerned in the production of sound and the glottis (that point where the air leaves the windpipe and enters the throat and mouth) become closed. The remedy for such a condition is again founded upon the principle of *opposition*, viz.: a lowered tone of the voice, which immediately causes a relaxation and opening up of the glottis allowing an escape of the sound in question.

The knowledge of these principles is, of course, essential, but of far more importance to the stammerer is the fact that he should be extremely careful and persistent in the application of them. It is not a question of being *cured* at the time you are *cured*, but of *remaining cured for all time*. This requires a willingness, confidence, determination and persistency in the application of the methods advised.



## STAMMERING A PSYCHIC DERANGEMENT

Stammering! What a world of woe is suggested by this little word! It pierces the heart of the unfortunate like a poisoned arrow. It reminds him of many years of misery gone by, and of many more to come unless he be able to avail himself of treatment. It shows him a thousand faces of scorning friends (?) and, perhaps, not one that respects him. Sorrow, reproach, and indignation seldom allow his heavy brow to clear.

Experience is certainly the best way of acquiring a knowledge of anything, and to a stammerer, his trouble will generally be uppermost in his mind, because he is painfully reminded of it day after day. It would seem probable by this that even a stammerer of limited judgment and in unfavorable circumstances might have some reasonable ideas about his impediment. Being myself until my cure afflicted with this trouble from my early childhood, I will venture to show briefly my conceptions of the causes, the cure and the results of stammering and stuttering.

Speech is the spontaneous outflow of the mind and character. You may immediately detect by the voice and articulation of any person some traits of his character and also of his mental powers. The ruffian does not speak like a refined gentleman, and a dunce has never that indescribable ring in his voice, which is a characteristic of every well-gifted person. I, therefore, believe that a hesitating speech comes to the lips of some persons just as naturally as fluent language to others, and that the causes of stammering are to be sought either in the mind or in the character, not in any derangement of the organs of speech. It is true that the difficulty consists chiefly in the inability to utter words or sounds on account of an abnormal condition—probably a contraction—of various

muscles in the mouth, throat, etc., but these physical manifestations can on no grounds be regarded as the primary cause of stammering and stuttering. It is evidently a mental difficulty or derangement.

But where in the psychic part of man could a defect arise that would cause the functions concerned in the production of speech to operate in an unnatural manner? The first and apparently most truthful idea would be that the stammerer's mode of thinking is similar to his articulation, that he thinks in a precipitous or sluggardly or illogical, irregular manner. Experience has evidenced the contrary. Although the stammerer's train of thinking may be greatly disturbed, this is solely affected by overpowering emotions, not by a stammering propensity. To mention my own case, when I stammered I admit that my thoughts were very often confused; but generally this seemed to be the mere result of mental agitation.

A defective mode of thinking can not be considered as the origin of stammering. The true cause must, therefore, lie in the whole disposition of a person. If this is the case, a stammerer's disposition must be such as to hinder his fluent speech. He has no special traits of character that cannot be found in anybody else. This is shown by the fact that anyone may stammer or stutter occasionally when he is perplexed, afraid, distracted, or in a passion. His predominating traits are sensitiveness and diffidence. Sensitiveness in itself does not necessarily produce speech-hesitation. Many persons may be even extremely sensitive, and yet talk without difficulty. The reason is evidently that their mental speech-centers receive sufficient stimulation by their nerves and will, to overcome the emotions to such a degree that their speech is unaffected.

A stammerer, however, has not this counterbalance when the difficulty arises. At first, he lacks the necessary will and concentration to overcome his agitation, and soon he will also be quite diffident, nervous, and wavering. Does this argue, then, that a stammerer must always have less self-control and less will-power than others not affected? I

think not, for when is the trouble generally acquired? Commonly, when the child is between four and ten years of age. If such a child is gifted with a vivid sense and quick thought and, perhaps, also with a fiery spirit, its undeveloped will may be entirely overruled while talking. I hardly believe that such deficiency of will in a little boy or girl can be regarded as a great fault. The fault is not the child's lack of energy, but rather the ignorance of the parents and teachers, who could easily eradicate this defect.

By all this we see that the stammerer's energies may be relatively superior to those of other persons; however one would expect his energy deficient, in proportion to his great sensitiveness. Most people get along very well with a minimum of will-power, as others have a will for them. They do their work faithfully, because they fear the wrath of their superiors or because they must toil incessantly, in order to gain a livelihood. They are seldom strongly tempted to follow their desires, because their fantasy, sensibility, and intellect remain in an undeveloped state as long as they live. They are not affected much by the beautiful. Unless a shock is likely to crush them, they will not stir. If they are left alone for a half hour, they will fall into a peaceful slumber. Quietly they plod along through life like a machine. But generally these people meet with success wherever they go. No business men and few teachers expect from their subordinates more than a faithful and regular performance of labor. Such people, therefore, prosper, are highly self-contented, and admired and honored by everybody. And justly so, for they are all very honorable men. Who would dispute this? The only, inevitable fault with which they may be charged is, that they judge the whole world according to their own nature, and, therefore, despise as deeply as their cold hearts admit, the stammerer, who is differently disposed.

But to return to the subject. The stammerer is rather *unbalanced*. At any rate, he requires more will-power,

more self-control, and more concentration to overcome powerful emotions than others require who are blessed with a natural speech. His deficiency in this respect is undoubtedly the primary cause of his trouble. But, of course, all this does not imply that a speech defect could not be acquired in any manner. Any mental or physical derangement may be caused in different ways; but at the root of the most of them there is a certain process of forming and developing which is taken (on the whole) as the typical cause of each special trouble. This is also the case in stammering and stuttering. It may be acquired by sickness, accidents, mental disturbances, etc. But an attempt to individualize cases, to state examples, or to treat this vast subject thoroughly, would be entirely impossible here.

I have not dwelt so long on the above to insinuate that a stammerer's disposition must be superior to that of others, or that he is always innocent of the accusations which have ever been heaped upon him. Nobody can deny that a stammerer may commit any sin or offense of which any one is capable, nor is it indisputable that by vice the impediment in question may be caused; but the thing which I wish to show clearly is, that a person may be of an irreproachable character and quite respectable, yet be a stammerer. This is often denied.

From all this it must appear clear that, in a treatment for stammering and stuttering, the abnormality of character must be considered, in order to remedy the extreme sensitiveness, the diffidence, or whatever else may affect the speech of the sufferer. But how is this achieved? Obviously by external influences which will operate on the mind and soul in a favorable manner. The conditions and surroundings in which a stammerer is living, ought to be such as to raise his spirits, kindle new energy, and direct his thoughts intensely to the suggestions given to effect a cure. All unnecessary idle diversions, for instance, must be avoided. He ought to associate with bright and



sunny people. It may be objected that this is more easily said than done. True enough, the position of a stammerer in society is not enviable. He is unfit to bear the wear and tear of life. He looks in his early youth to a friend for a support, but will find it quite difficult to secure one. This may grieve him deeply, but is nevertheless the natural consequence of his attitude towards his surroundings. Let him look to himself for help. Let him be the architect of his own fortune. Let him be happy, self-contented, and pleasant, and—he may rely upon it—there will soon be others about him. A smile begets a smile, a frown a frown. The immutable laws of nature will not conform to his mood, but he must conform to nature's laws.

True happiness is a great prerogative. If the stammerer can attain that, his trouble will be less severe, his health will improve, and he will be better off in every way. Gayety is emblematic of life, sorrow of death. Therefore, be happy and contented at any price—not with the face only, but from your inmost soul. An apparent hilarity is not sufficient to produce the same effect as a radical change of the deepest sentiments. There seems really to be diffused about the unfortunate an atmosphere which will ever betray the sentiments of his heart.

Although stammering is a mental, rather than a physical, abnormality, any simple test will show very soon that a treatment intended as a remedy to the mind or disposition only, is in no wise sufficient to effect a complete cure. Stammering originates in the mind, but it always develops more or less into a mere physical difficulty or habit. It will be admitted by almost every stammerer that he may lapse into his unfortunate manner of speaking even though he is neither embarrassed nor confused, yea, that he is liable to stammer even under the most encouraging circumstances. The trouble is that anybody who is often confused to such a degree that he stammers, will soon become more and more accustomed to his peculiarity of speech. Very soon it will be quite natural for him to stammer, and in his brain the idea will continually be-

come more deeply fixed that he cannot speak otherwise. This belief may be so firm and steady that even in his dreams a stammerer will talk in his usual stammering manner. The same person may, therefore, stammer at one time on account of a lack of concentration, at other times from mere habit he will use his organs of speech in an incorrect manner, because he firmly believes that he must stammer. Each stammerer has to some extent his own peculiarities, but all the various manifestations will yield readily to the same general rules that are set forth for all stammerers. They are, in short words, a series of exercises. But will not also these physical defects disappear gradually after the will has been sufficiently strengthened? The assertion that everything can be attained through will-power is older than the pyramids of Egypt and to humanity, just as useless.

The condition of the body is also of great importance. Everything that adds to the health and vitality must be considered. Regular physical exercises are especially commendable, because they give more self-reliance and insure discipline. Bad habits, that lower the spirits and undermine the health, are the worst enemies to the stammerer. Even an occasional hardship or sickness increases the trouble greatly. The cause of this is easily understood if it is acknowledged that stammering is primarily a psychic derangement.

The question may arise: How is a stammerer to be treated and what can he do for himself if his circumstances do not allow a course of treatment for a cure? To answer this question, is a puzzle just as great as to give instructions how to treat a sick person without allowing him a physician to attend to his disease. He must be cured. This is the best advice. He is a burden to himself and others. Whenever he stammers, it is a nervous strain on his hearers, and if he is in their midst, a quiet and meditating listener, he will be troublesome to them also. Any person who stammers should make it his ambition to break these shackles as soon as possible. The stam-

merer is often very much to be blamed for his negligence: he should not harness himself sullenly into the yoke and plod wearily through existence, but rather abandon everything and try his utmost, till his terrible impediment is removed. It will hardly be possible for all business men to spend several hours daily in lingual and gymnastic exercises, nor can the average student afford to abridge his hours for study so much without neglecting the prescribed duties. It is, therefore, necessary to let all business or studies rest for a while and to concentrate all energies on the one point; that of a complete cure. Circumstances may arise, of course, where such a loss of time is impossible; but a mature person will generally find means to do what he considers as absolutely necessary. It is in this respect, as Carlyle says: "Fortune may render you unhappy, but it is only yourself that makes you despicable." With stammering children, the case is different. They are under the care of their parents and teachers. If they have already reached a suitable age, they ought, where possible, be sent to a reliable institution. But if this cannot be done, the child should not be neglected. It is wrong to send a stammering boy to school, where he can never progress as he ought to, and it is wrong to accept him at any school; stammering is contracted by sensitive children.

The stammerer should be trained before going to school. This should not be neglected. It cannot be denied that a stammering boy is a person very difficult to deal with. Much kindness will only foster his sentimentality, lack of will-power, and make him careless about his impediment. Severity, on the other hand, will generally take his last bit of self-reliance or make him embittered, haughty, and petulant without helping him in the least. The best way would seem to be to treat him just as other children; but this is also wrong, because he is not like the others. Words that are taken in good humor by his comrades, may offend him deeply, and, if the authorities are correct, you cannot expect as much from him

in any respect as from other children. It requires, therefore, much tact, patience, and energy to induce such a child to govern his turbulent nature and do his duties diligently. It is certainly a great but common fault to let a stammering pupil struggle his way through the school without anyone attempting to help or advise him. A plain, warm admonition would sometimes be of immense benefit to the inconsiderate youth, and a short outline of appropriate exercises to remedy his speech defect would, probably insure to the teacher for his whole life the love and gratitude of the ex-stammerer.

In considering all this, it is at once clear that by observing these two points—the psychic and the physical side of the trouble—a perfect cure of any ordinary case of stammering ought to be possible in a comparatively short time, providing the method employed is rational as well as effectual. Shall the stammerer's sensibility be eradicated or shall his modesty be replaced by insolence? Never! The effect may be ever so good upon the speech, upon the whole person it is the worse, and it would, indeed, be better to remain a stammerer than to become an unfeeling block or a pretentious fool. It is not by destroying or repressing those traits of the character of the stammerer, which may often be the finest and most precious part of his nature, that the cure can be effected, but rather by directing it to the right and normal path. On the other hand, the embarrassment may be due to an excessive pride and vanity. This extreme egotism does not allow the stammerer to act in a natural and easy manner, if observed. If such is the case, all this must, of course, be discarded entirely to relieve the unfortunate of the burden which he is to himself. This is all achieved, as shown above, by appropriate and regular exercises and by a correct mode of living. Therefore, all that is lacking to the stammerer may be comprehended in the one word—*discipline*. Discipline in the widest sense. Discipline in every way, discipline of the body and soul, of the physical as well



as of the mental faculties. Such is the cure of stammering.

It is strange beyond belief that very few people, even persons of high education, do not seem to acknowledge that continual speech-hesitation has any lasting effect whatever upon the sufferer. And yet this is the very thing that makes stammering so horrible, for a person must, indeed, be of a strange disposition if it does not make an impression on him to be ridiculed, despised, or at best pitied by every person with whom he converses; to be at the foot of the class in school, and the last to be trusted with any responsible position in life. Even in the most amiable and innocent soul, dark and bitter thoughts may arise, and the youthful mind may easily be impressed so deeply by the countless hardships and apparent cruelties of teachers and companions that he looks gloomily on this fair world, which was, indeed, not intended as a place of misery. And how soon may not this intensified sentiment develop to anger with man and God, to lasting misanthropy, and even far greater perversions.

But this is an effect produced by mere outer circumstances only. It cannot be denied that a sensitive person will often see afflictions where there really are none at all. Life in any shape contains pain enough for hearts so disposed. There are, however, other direct and indisputable results of stammering. In the whole creation, a tendency prevails to maintain perfect equality or symmetry. This may be seen in occurrences of every day life. But we need not go far to observe the truth of this assertion. Nowhere is the tendency to establish and preserve a true balance and perfect symmetry more apparent than in man himself. Every abnormal condition in the body will create to a certain degree a similar condition in the soul, and every defect in the spiritual being has its physical consequences. The stammerer is not excluded from this universal law. The results of his difficulty are partly physical and partly of a psychic nature. To discuss the physical effects and possibilities thoroughly, would

require the learning of a student of physiology. I will, therefore, confine myself to a few facts that are apparent to everyone.

Every stammerer breathes incorrectly. This is a result of his agitation and of his futile efforts to speak fluently. He has actually forgotten how to use the lungs correctly while speaking. Often he will begin a sentence with empty lungs. The strain which ensues on these organs is often terrible. The energy used to press out the word, without the necessary air, will sometimes strain the muscles of the breast and abdomen to such a degree that the worst consequences may follow. Furthermore, the throat itself and the vocal organs, with their delicate mechanism are greatly affected. The stammerer often speaks in a high pitch, which seems to be the result of the lack of air or his excessive energy. The continual strain will soon play havoc with his voice and make him disposed to disease of the throat and chest. These are direct results. Others, such as nervousness, etc., are more indirect, but not less serious. The stammerer is depressed or despondent. This state of mind is, undoubtedly, of the greatest harm to health and is sufficient to break down, in the course of a very few years, the constitution of the healthiest person. Therefore, a stammerer who continues to suffer should not expect (more than any other person that carries with him a continual grief), to live very long.

The effects of stammering and stuttering are far-reaching, and most persons afflicted with the trouble do not realize at all how much harm this speech difficulty has done them. It would be unjust to say that every stammerer is subjected to all the baneful influences of his defect. He may resist, and, undoubtedly, does to a degree. Still the danger is imminent, and it requires a strong and unyielding spirit to resist. Most stammerers are known for their lack of will-power, which may also be a direct result of speech-hesitation, for at every vain attempt to speak, the stammerer is again thwarted in his determina-

tion to express himself fluently. This continual defeating of the will, is apt to end at last in absolute imbecility.

Very much akin to the weakening of the will is the average stammerer's lack of concentration. Could he concentrate all his thoughts better on one object, he would certainly throw off very soon that infirmity of revolution with all its tormenting and enfeebling consequences. A great temptation and danger to the youth that stammers, is to indulge in endless dreams about his difficulty, to form useless plans, and to look in the ideal world for the pleasures which he cannot find in the real one. If a sensitive boy stammers in class, he will not forget the humiliation and torture in a few minutes and apply his mind to the studies as readily as before, but will rather be inclined to brood over his misfortune. Undoubtedly, he will make an attempt to pay attention, but if the torture is repeated again and again—as it must be—he will find it very difficult to subdue all thoughts about his sorrowful experiences. This continual intruding of different thoughts is, in other words, nothing else than a deficiency of concentration or attention, the indispensable requisite for progressing in any business or study. His instructors are generally indulgent towards him, but very seldom understand his condition. Some, however, are convinced that the stammerer's ambition and will-power must be roused, and that this can be effected in no better and faster way than by stern treatment, and frequent employment of sarcasm. Such scorning or careless attitude of his relatives, teacher and friends is very harmful to him. The stammering child may even begin to think disrespectfully of all that treat him in this way. What a mistake! The most loving and well-educated parents may do the same thing. It is not unkindness of the heart that prompts them; it is their ignorance of the stammerer's trouble that induces them to do what is not approvable.

O, what a curse to this world is ignorance! It has done more harm to humanity than malignity, pride, and passion combined. It has made whole nations a herd of

frenzied fanatics and created for millions a miserable life and for many a shameful death. A stammerer must suffer greatly on account of the general ignorance in regard to his defect. Most people that despise, scorn, and taunt him would not do so, if they knew anything about his sad affliction. Few persons would be wicked enough to increase his burden, if they only knew the depth of his pain, and no parents or guardians could be so inconsiderate as to expose their stammering child alone and helpless to the rigid demands and duties of life.

Stammering and stuttering is a serious trouble, and I wish that every stammerer that glances over the lines in this book may some day look back to the trying days of his youth, and exclaim with a thankful heart: "I have conquered!"



## THE EVOLUTION OF A STAMMERER.

Once upon a time there was a Little Boy who stuttered. Well, why not? He wouldn't be a boy if he didn't stutter a little. But he grew a little, and he stuttered a little more. Then the Little Boy's Papa said to him: "Boy, you must not stutter. It is exceedingly unpleasant," and the Little Boy's Teacher said to him: "Boy, you must not stutter. It takes up too much time. I will whip you if you do so again."

But they did not tell the Little Boy how to stop, so he didn't, because he couldn't. Moreover, he reasoned, "they used to think it 'cute' when I stuttered a little; now, why isn't it 'cuter' when I stutter more?"

And the Little Boy grew to be a Tolerably Big Boy. And he still stuttered. Then the Tolerably Big Boy's "Governor" called him, and administered a tweak to the Tolerably Big Boy's ear. "Boy, why do you disobey me? Why do you ardently persist in manifesting your unpleasant impediment so pertinaciously. Now go?" And the Tolerably Big Boy's Teacher said to him: "Boy, you still stutter. Why do you disobey me?" and she vigorously applied the birch. "Now stand here in the corner as an example of disobedience to others."

And the Boy's "Governor" and Teacher both agreed that he would outgrow the stuttering; but in the meantime he must be kept well in check. The Teacher was kind enough to give him a little advice: "Now, Boy, think before you speak, and you will not stutter."

And the Tolerably Big Boy grew into a Big Boy. It was still advisable to keep him under discipline, so the Big Boy's Teacher still kept him in the corner with the dunce's cap on his head, for an example to the others. It was surprising to note how beneficial the discipline was to the erstwhile disobedient Boy, for he obeyed his Teacher's advice to the letter, sometimes stopping as often as three times in one word, and of course, then, when he stopped he would have plenty of time to think before he spoke.

Then the Big Boy grew to be a Youth, but the Youth stammered, and he came to view the World through indigo spectacles, and wore a face as long as Deacon Goodboy's, and half as wide. Then the Youth's "Old Man" called to him and said: "Boy, you have been an undutiful son to me,—a disobedient son, you have had every advantage, every help to make you the great man I planned, but you disobeyed. What are you but a stammerer? I am bitterly disappointed in you. Here is your portion of this world's goods. Take it, and go."

So the poor Youth took the purse and turned into the world. Surely everyone could see the brand of humiliation and disgrace upon him, he thought. But the world rushed madly, swiftly by, and the Youth, unused to its ways, stood dazed and helpless, alone in the un pitying throng.

"Ah, this is not the place for me," the Youth sighed, and turning into a lane, pursued his solitary way. On and on he went, led by impulse. The lane widened into meadows, and presently he came to a beautiful little dell. Throwing himself prone upon the ground, he drank in the beauty and quietude with ecstasy. Around him, to form a fairy alcove, the green earth rose to broad heights. Over its water-worn brink a little stream leaped and tumbled and sang in its plunge to the dell below, where it continued its winding way in the lowland, through a grove, now leaping, now dancing, to the tune of feathered songsters. "Ah! here is what I love and need—nature, nature, nature!" And he murmured:

"To him who in the love of Nature holds  
Communion with her visible forms, she speaks  
A various language. \* \* \* \*  
Go forth under the open sky, and list  
To Nature's teachings."

"May she indeed be my teacher, for I have none other," he moaned, and he was soon lulled to sleep by the musical song of the waterfall.

He awoke, much refreshed, both in body and spirit. One of the first greetings to his ear was the continuous soft, musical, plash, plash of the little waterfall. "How different this sound is from that which my Teacher used to bring before me: Now remember what Shakespeare says about your stuttering. He says it is like water pouring from a jug, 'either too much at once, or none at all.' Why did she never bring the other side before me and tell me to make it continuous, musical, like this waterfall? Ah! they were always telling me what not to do. Why did they not tell me what to do?"

For a long time the youth mused. He had been taught to reason, to philosophize. In nature he had been taught that all forces and laws under the same conditions bring always the same results. This waterfall represented the ideal, nature's force, working along its line of least resistance; the water pouring from a jug represented the force of nature, perverted. To explain the cause of the latter's action, he had but to compare the conditions of the two. Make the conditions the same, and lo! the same results. But he had come to think of all the reasoning he had been taught to do, as relating to the earth, the moon, the stars, something apart from himself; something far, far away.

But now as he mused the eloquence of nature glided

"Into his darker musings with a mild

And healing sympathy."

"Beauty born of murmuring sound passed into his face."

A deep understanding came to him. "If the speech of a stammerer is like water pouring from a jug, then the speech of a perfect speaker is like the natural waterfall. Remove the unnatural conditions, making the conditions the same, and lo! perfect speech!"

It seemed strange to him that he should never have thought of this before. And yet it was not strange; for in all his life, the thrusts had been made against his speech as it was, and no ideal had been placed before him to attain. Now both the perverted and the natural were brought before him so plainly as to invite reason.

And the Youth rejoiced; for now he had a definite course to pursue. He took from his pocket his Book of Universal Knowledge, and studied carefully, Normal Speech, in all its parts and relations. How delicate, how intricate, how wonderful is the mechanism of speech!

First of all, he learned, that for the best results in speech, the body and mind, the servants of speech, must be kept in the best condition, and he learned that each touch of ill-health, each emotion, whether of joy or sorrow, love or hate, pain or pleasure, has a direct influence upon speech. He found that this also was true in the waterfall; each drop of rain, each breath of wind influenced to a degree its ripple and song. And he endeavored to lead that temperate life, that Nature's child shall lead, for Nature's child.

“\* \* \* \* \* in rock and plain,  
In earth and heaven, in glade and bower,  
Shall feel an overseeing power,  
To kindle or restrain.”

Then he learned that, what the water is to the waterfall, breathing is to speech; that, as the waterfall cannot be deep and regular unless its stream of water be so, speech cannot be regular and continuous unless its supply of breath be so, and he took care to perfect his breathing.

Next he learned that speech is vocalized and modified breath; that as each tone of the waterfall is characterized by the rock or cavity the water strikes, so the sound of each letter is characterized by a definite arrangement of the vocal cords, tongue, teeth or lips; that there is only one way to make the sound of the letter *a*, one way to make the sound of the letter *b*, and to make the sound of the letter *c*, and he dropped the old method of chance, and took the new unchanging method.

Thus he had labored on to perfect speech, but all this was not accomplished in a day; it took weeks and months. Oft-times he grew discouraged, but he still persevered, and by so doing gained will-power and concentration.



During all this time Nature had been his teacher in all ways. She had fulfilled her prophecy:

"The floating clouds their state shall lend  
To him; for him the willow bend;  
Nor shall he fail to see,  
Even in the motions of the storm,  
Grace that shall mould the manly form  
By silent sympathy."

The rhythm and music of the waterfall had passed into his speech; "the beauty born of murmuring sound" had taken up its eternal dwelling place in his countenance.

"And vital feelings of delight  
Had reared his form to stately height."

Thus the Youth had passed into Young Manhood.

Long since, he had thrown the indigo spectacles into the pool at the foot of the falls, and the water descending had dashed them to powder upon the rocks. The world now held for him no terrors. He must return to it for his own strengthening, as well as for the good of others.

So leaving the dell, he passed through the meadows and the lane, into the World and up to his home. The Father greets him at the door: "What! Who? Not my Son? Is this some miracle?"

"No, my Father, it is no miracle. It is the result of careful, persistent, systematic reasoning and application of knowledge."

But the Father cares not how nor wherefore. He puts a ring upon his finger, and makes a feast for him. To the World he says, "Behold my son—my pride—all mine." And the old Teacher comes forward, modestly (?) and says, "Behold the result of my early labors. Pleasant is the result of honest toil!"

Years afterward, when worn and weary, the Young Man, now passed into Old Manhood, turns in fancy to the dell, a feeling of calmness and peace steals over him. But long, long years before, in the dell, he gladly bade farewell to

"The memory of what has been,  
And nevermore will be."

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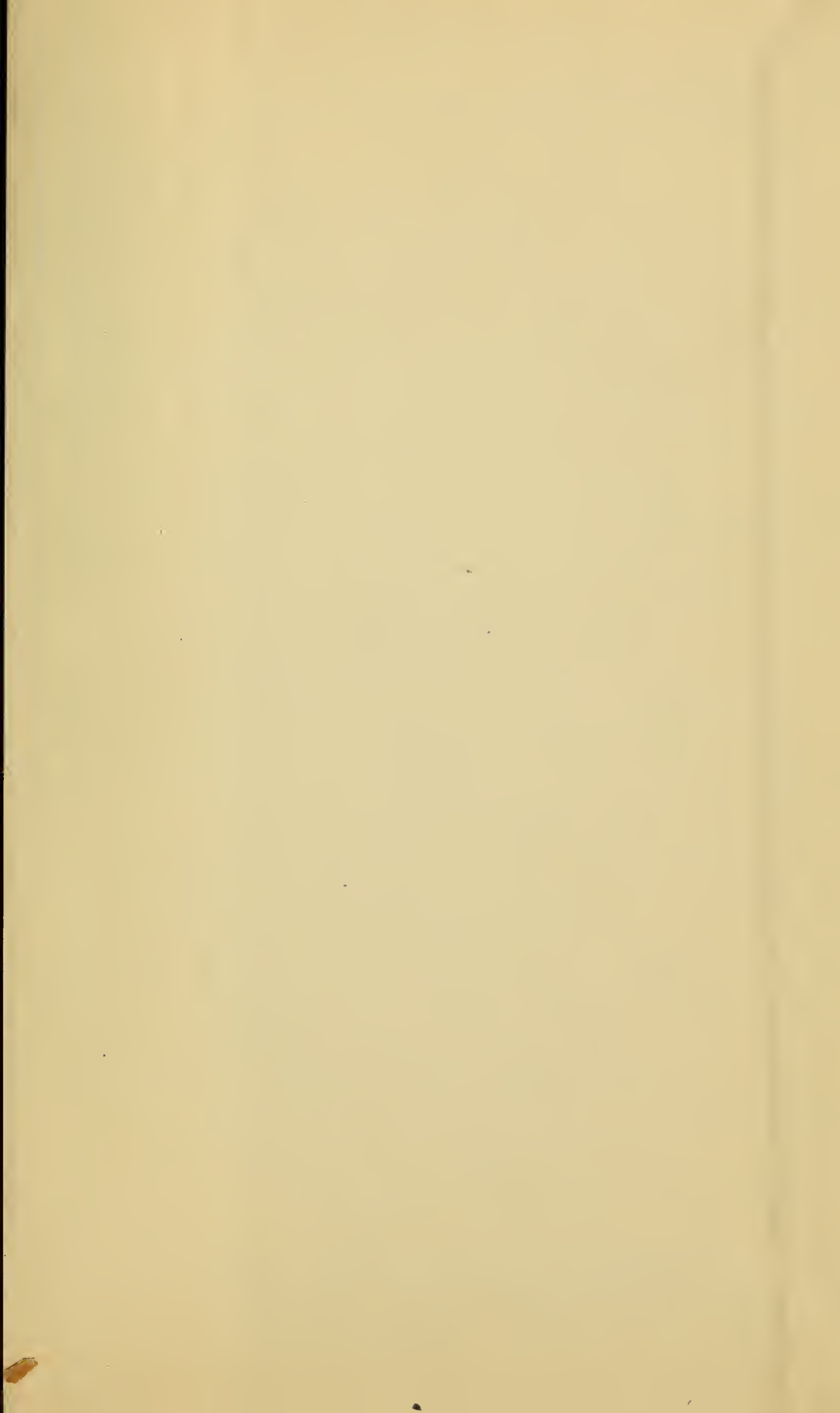
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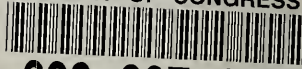








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